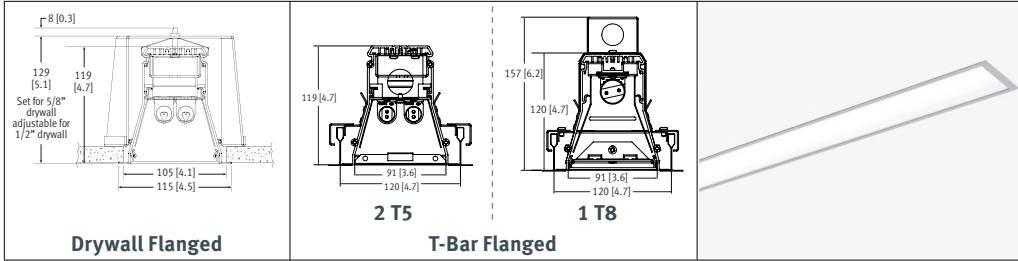


# Grande RM4D

## Fluorescent . Recessed Flanged



CAT #:
PREP BY:
DATE:
PROJECT:
TYPE:
NOTES:



### ORDERING LOGIC

Example Part Number: RM4D-2T8-8-M-W-D1LR-D-1-D

RM4D	# of lamps	Source	Length	Optics	Up	Down	Finish	Ballast	Circuitry	Mounting	Voltage	Controls
------	------------	--------	--------	--------	----	------	--------	---------	-----------	----------	---------	----------

# of Lamps	Source	Optics Up	Finish	Circuitry	Voltage
1 = 1 Lamp	T8	_ = None (leave space empty)	SA = Satin Aluminum	1 = 1 Circuit	1 = 120 V
1S = 1 Staggered* (excludes 4 ft)	T5	<b>Optics Down</b>	W = White	LR = Left/Right Switching (2 Lamps)	2 = 277 V
2 = 2 Lamps	T5HO	SP = Specular Parabolic Louver **	C = Custom Finish <i>Specify RAL#:</i>	AS = Alternate Switching	3 = 347 V
2S = 2 Staggered* (excludes 4 ft)	Length	SSP = Semi Specular Parabolic Louver **	<b>Ballast</b>	EM = Emergency/Night Light	4 = UNV (120 - 277 V)
* T8 only with Meta Ice	4 = 4 ft	M = Meta Ice	E = Electronic Instant Start (T8)	B = Battery Pack	<b>Controls</b>
	8 = 8 ft	A = Asymmetric Reflector *	R = Programmed Rapid Start	<b>Mounting</b>	_ = None (leave space empty)
	12 = 12 ft	MA = Meta Ice with Asymmetric Reflector *	D1 = 0-10V Dimming	D = Drywall Flanged	D = Daylight Sensor
	R = Continuous Rows See p. 4	* 1 lamp only ** T8 - 1 lamp only T5/T5HO - 1 to 2 lamps	D2 = DALI	T = T-Bar Flanged (not available with 2-T8 lamps)	O = Occupancy Sensor
					DO = Daylight/Occupancy Sensor

### SPECIFICATIONS

Due to the Continuous Improvement Policy at Metalumen, we reserve the right to change our specifications without notice.

**Housing:** Rigid extruded aluminum body, 2.0mm (0.08") nominal wall thickness. 95mm (3.7") wide x 102mm (4.0") high, steel formed end caps.

**Optical System:** Tubular fluorescent lamps transmits to an internal high performance-side kicking reflector that then passes

through our Meta Ice acrylic diffuser for smooth distribution; this creates a continuum of smooth consistent light.  
**Finish:** Satin Aluminum and white are standard finishes. For custom finish, contact factory.

**Weight:** 2.1 kg/300mm [ 4.6 lb/ft ]

**Mounting:** Mounting brackets/clips provided. Recessed T-Bar fits 15/16" T-Bar.  
**Electrical:** Factory prewired with easy wire quick connect sections.

**Ballast:** Instant Start, Programmed Rapid Start, 0-10V Dimming, DALI

**Controls:** Refer to Ordering Logic chart

above.  
**Approvals:** Certified to NRTL and IES testing standards. This product is cULus listed. RoHS compliant.  
**Environment:** Suitable for dry locations.

### WARRANTY

Metalumen will warrant a one year parts and labour warranty. Warranty is valid if luminaire is installed and used according to specification. The Ballast will carry a standard 5 year warranty by the manufacturer. If defective, Metalumen will send replacement ballasts or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Metalumen.

**APPROVALS**      Signature \_\_\_\_\_      Date \_\_\_\_\_

FILE NAME: Grande\_RM4D\_FL\_D\_T\_SPEC\_SHEET\_20180705

570 Southgate Drive, Guelph, Ontario N1G 4P6  
Mailing Address: P.O. Box 1779 Guelph, Ontario, N1H 6Z9

1.800.621.6785 | T 519.822.4381 | F 519.822.4589  
www.metalumen.com

Metalumen

FEATURES

**COMMERCIAL // Commercial Lighting** - With over 30 years of successful architectural lighting, providing unique concept and installation solutions has become second nature. Metalumen's Start to End Development Process results in unique performance, design and architectural requirements from concept through implementation. Metalumen's Lighting Solutions have been

applied to customer projects requiring: high profile architectural installations; improved energy efficiency; retrofit installations; unique installations. Metalumen can provide top-quality innovative fixtures when and where they are needed and, at the same time, allow the customer to determine their level of involvement in Metalumen's Start to End Development Process.

**MEDILUMEN // Healthcare Lighting** Every product in our broad line of healthcare luminaires has been strategically engineered to meet modern healthcare demands while addressing patient needs and aesthetic requirements.

**MetaICE** META ICE is a smooth Continuum Optical System with a 91% transmission rate that creates

smooth subdued lighting with no source imagery. Meta Ice is a premium lensing optic unique to Metalumen but coupled with a high performance side kicking specular reflector to maximize the lumens from the source creating an unparalleled lumen delivery.

PHOTOMETRIC DATA

2 T8 LAMPS

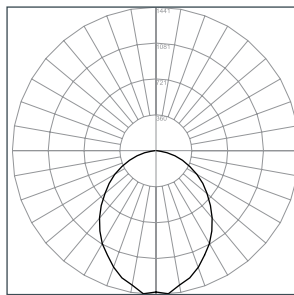
**File Name:** RM4D-2T8-4-M  
**Luminaire Lumens:** 5900  
**Input Watts:** 56  
**Efficacy:** 55 lms/W  
**Optics Up:** None  
**Optics Down:** Meta Ice

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR												
0	71	71	71	71	69	69	69	69	66	66	66	
1	65	62	60	57	63	61	59	57	58	56	55	
2	59	54	50	47	58	53	50	47	51	48	45	
3	54	48	43	39	53	47	43	39	45	42	38	
4	50	43	38	34	48	42	37	33	40	36	33	
5	46	38	33	29	45	38	33	29	36	32	29	
6	42	35	29	26	41	34	29	25	33	28	25	
7	39	31	26	23	38	31	26	23	30	26	22	
8	37	29	24	20	36	28	24	20	28	23	20	
9	34	26	22	18	33	26	21	18	25	21	18	
10	32	24	20	17	31	24	20	17	24	19	17	

PHOTOMETRIC CURVE



CANDLE DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0.0	22.5	45.0	67.5	90.0
0	1416.863	1416.863	1416.863	1416.863	1416.863
5	1408.094	1427.920	1415.673	1441.378	1384.209
10	1338.881	1377.669	1391.605	1367.140	1348.148
15	1324.172	1326.562	1307.967	1320.357	1311.721
20	1258.458	1279.230	1260.279	1243.179	1247.645
25	1199.468	1192.511	1182.084	1154.781	1139.248
30	1123.247	1099.016	1105.872	1077.684	1064.796
35	1030.444	1032.153	1009.387	981.993	965.727
40	944.955	929.198	904.204	878.855	861.816
45	836.965	832.967	800.751	774.679	769.308
50	740.195	728.374	694.999	667.767	674.094
55	649.284	624.006	596.703	573.734	572.391
60	539.107	528.599	495.620	476.211	465.489
65	439.488	421.880	394.557	376.074	374.466
70	334.509	318.823	298.875	283.220	281.664
75	230.690	217.791	202.624	196.439	191.841
80	141.915	132.709	123.635	114.134	109.496
85	61.106	58.227	51.035	49.214	48.655
90	16.632	13.295	8.860	9.196	9.521

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	8745	5012	4224
55	8105	3867	3176
65	7081	2737	2167
75	5473	1563	1197
85	2917	459	341

2 T5 LAMPS

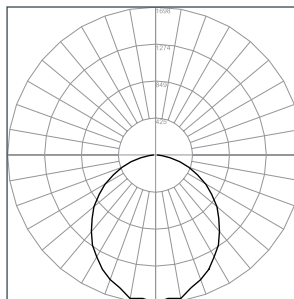
**File Name:** RM4D-2T5-4-NM  
**Luminaire Lumens:** 5800  
**Input Watts:** 59  
**Efficacy:** 70 lms/W  
**Optics Up:** None  
**Optics Down:** Meta Ice

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR												
0	89	89	89	89	87	87	87	87	83	83	83	
1	82	78	75	72	80	76	73	71	73	71	69	
2	74	68	63	59	72	67	62	58	64	60	57	
3	68	60	54	49	66	59	53	49	57	52	48	
4	62	53	47	42	61	52	46	42	50	45	41	
5	57	48	41	36	56	47	41	36	45	40	36	
6	53	43	36	32	52	42	36	32	41	35	31	
7	49	39	33	28	48	39	32	28	37	32	28	
8	46	36	29	25	45	35	29	25	34	29	25	
9	43	33	27	23	42	32	27	23	32	26	22	
10	40	30	25	21	39	30	24	21	29	24	20	

PHOTOMETRIC CURVE



CANDLE DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0.0	22.5	45.0	67.5	90.0
0	1698.11	1698.11	1698.11	1698.11	1698.11
5	1652.08	1687.84	1664.26	1665.73	1665.34
10	1671.98	1644.03	1634.50	1643.86	1619.51
15	1577.97	1606.37	1583.39	1576.21	1600.77
20	1522.55	1529.92	1515.19	1509.55	1495.16
25	1447.38	1432.58	1442.70	1420.10	1406.72
30	1347.73	1362.24	1343.05	1328.46	1313.96
35	1262.37	1250.06	1230.74	1211.64	1195.33
40	1143.45	1136.91	1115.84	1089.76	1077.84
45	1030.67	1029.32	1004.47	976.55	962.18
50	921.89	910.62	890.90	849.51	837.27
55	789.19	780.89	749.79	720.15	711.78
60	670.68	660.02	630.05	596.51	594.06
65	533.23	525.82	497.74	473.52	470.04
70	408.55	404.13	377.97	360.40	354.60
75	288.44	279.41	257.78	244.70	237.30
80	171.77	168.38	153.32	144.24	143.53
85	76.97	73.95	62.80	60.66	62.14
90	21.69	15.40	11.31	11.92	12.42

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	10767	6286	5282
55	9850	4858	3949
65	8589	3452	2719
75	6842	1988	1481
85	3674	565	435

PHOTOMETRIC DATA (continued)

2 T5HO LAMPS

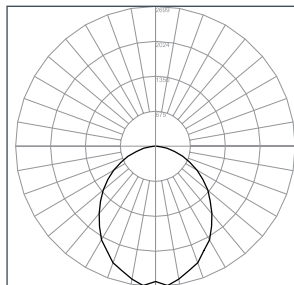
File Name: RM4D-2T5HO-4-M  
 Luminaire Lumens: 10000  
 Input Watts: 117  
 Efficacy: 58 lms/W  
 Optics Up: None  
 Optics Down: Meta Ice

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR												
0	80	80	80	80	78	78	78	78	75	75	75	
1	73	70	67	65	72	69	66	64	66	64	62	
2	67	61	57	53	65	60	56	53	58	54	51	
3	61	54	49	44	60	53	48	44	51	47	43	
4	56	48	42	38	55	47	42	38	46	41	37	
5	52	43	37	33	50	42	37	33	41	36	32	
6	48	39	33	29	47	38	33	29	37	32	28	
7	44	35	30	25	43	35	29	25	34	29	25	
8	41	32	27	23	40	32	26	23	31	26	23	
9	39	30	24	21	38	29	24	21	29	24	20	
10	36	27	22	19	35	27	22	19	26	22	19	

PHOTOMETRIC CURVE



CANDLE DISTRIBUTION


Vertical Angle	Horizontal Angle				
	0.0	22.5	45.0	67.5	90.0
0	2607.24	2607.24	2607.24	2607.24	2607.24
5	2669.51	2669.47	2658.61	2699.15	2584.87
10	2544.50	2607.35	2608.18	2602.60	2564.60
15	2515.25	2475.35	2488.92	2485.03	2516.37
20	2382.59	2374.93	2365.70	2392.52	2384.18
25	2266.41	2266.99	2251.81	2219.06	2264.40
30	2116.53	2114.69	2095.74	2086.32	2070.71
35	1957.34	1940.14	1927.03	1886.10	1896.35
40	1772.25	1755.87	1737.09	1692.07	1691.64
45	1567.59	1579.22	1534.52	1498.69	1493.68
50	1404.84	1386.19	1360.28	1318.85	1316.89
55	1211.47	1190.58	1151.84	1117.63	1107.20
60	1023.32	995.25	954.57	933.75	920.22
65	806.47	812.31	759.65	733.65	736.24
70	618.43	628.85	577.20	562.60	548.70
75	434.36	421.39	398.88	382.21	388.58
80	266.96	252.12	235.50	225.29	226.42
85	116.11	114.92	99.25	99.25	100.04
90	32.11	22.59	18.91	19.88	18.79


LUMINANCE DATA (CD/M²)


Vertical Angle	Horizontal Angle		
	0	45	90
45	16375	9604	8200
55	15120	7463	6143
65	12990	5269	4259
75	10303	3076	2425
85	5542	893	701


**MOUNTING - ROW CONFIGURATIONS - DRYWALL - T8**


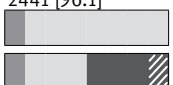
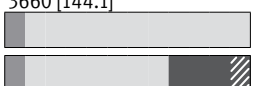
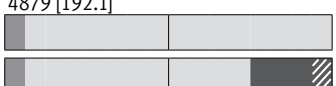

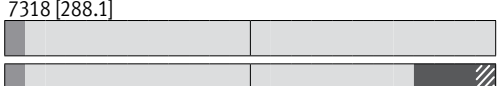
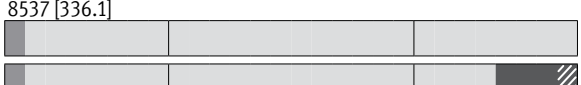
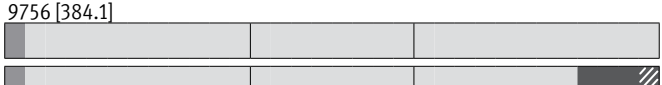
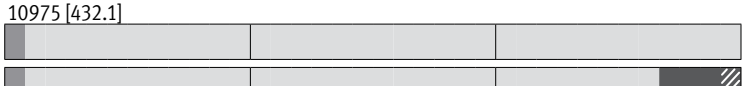
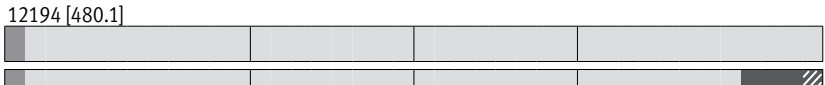
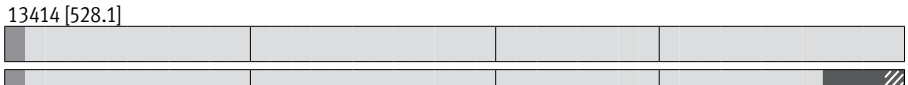
**LEGEND**

A  A = Run Length (Body)

 Standard (STD) Wire Entry Location (located on the end cap)

 Emergency (EM) Lighting Location

 Emergency Wire Entry Location (located on the end cap)

QTY	Nominal Length	Run Length Overall	Max. Recommended Length Drywall Opening (Max. Rec. Width = 105mm)	Alone Length	Start Length	Mid Length(s)	End Length	Light Level STD = Standard w/EM = With Emergency	
—	<b>4'</b>	1245 [49.0]	1235 [48.6]	<b>4</b>				STD	1224 [48.2]
								w/EM	
—	<b>8'</b>	2462 [96.9]	2452 [96.5]	<b>8</b>				STD	2441 [96.1]
								w/EM	
—	<b>12'</b>	3682 [145.0]	3672 [144.6]	<b>12</b>				STD	3660 [144.1]
								w/EM	
—	<b>16'</b>	4901 [193.0]	4891 [192.6]	<b>8</b>	<b>8</b>			STD	4879 [192.1]
								w/EM	
—	<b>20'</b>	6120 [240.9]	6110 [240.6]	<b>12</b>	<b>8</b>			STD	6098 [240.1]
								w/EM	
—	<b>24'</b>	7339 [288.9]	7329 [288.5]	<b>12</b>	<b>12</b>			STD	7318 [288.1]
								w/EM	
—	<b>28'</b>	8558 [336.9]	8548 [336.5]	<b>8</b>	<b>12</b>	<b>8</b>		STD	8537 [336.1]
								w/EM	
—	<b>32'</b>	9778 [385.0]	9768 [384.6]	<b>12</b>	<b>8</b>	<b>12</b>		STD	9756 [384.1]
								w/EM	
—	<b>36'</b>	10997 [433.0]	10987 [432.6]	<b>12</b>	<b>12</b>	<b>12</b>		STD	10975 [432.1]
								w/EM	
—	<b>40'</b>	12216 [480.9]	12206 [480.6]	<b>12</b>	<b>8</b>	<b>12</b>		STD	12194 [480.1]
								w/EM	
—	<b>44'</b>	13435 [528.9]	13425 [528.5]	<b>12</b>	<b>12</b>	<b>12</b>		STD	13414 [528.1]
								w/EM	
—	<b>48'</b>	14654 [576.9]	14644 [576.5]	<b>12</b>	<b>12</b>	<b>12</b>		STD	14633 [576.1]
								w/EM	