

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: FAIL-SAFE

Report Number: 10897.0

Luminaire Tested: **TRO15-C-11OOMH**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 10897.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: TRO15-C-1100MH
Description: 15"DIA CEILING MOUNT LUMINAIRE
WHITE FLAT REFLECTOR w/INTERNAL RADIAL RIBBED LENS
Light Source: 1/100W CLEAR ED17 MH LAMP M90 M100/U/MED
Ballast/Driver: -

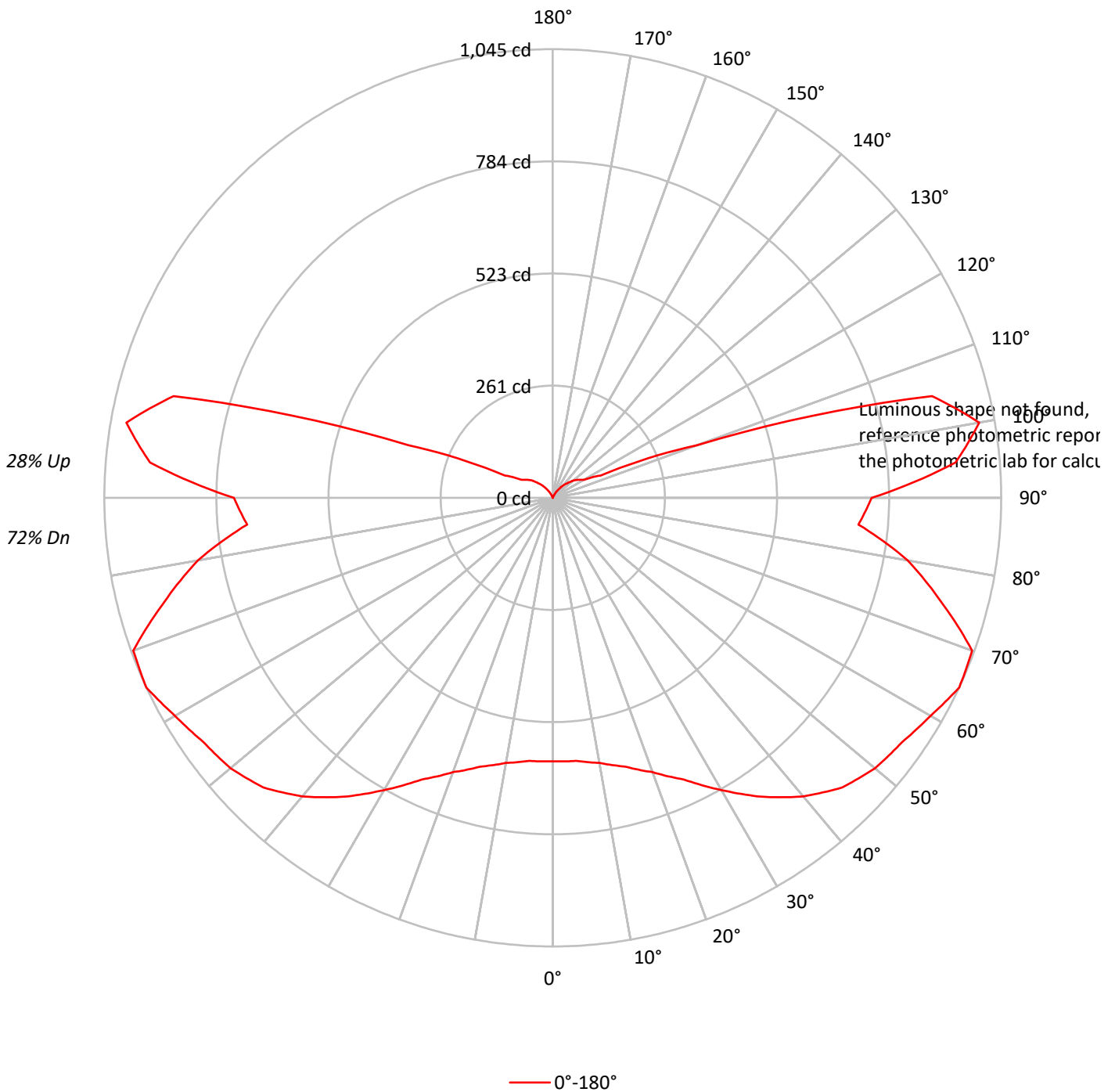
Summary

Lumens per Lamp: 9000 (1 lamp)
Luminaire Lumens: 7723.9 lumens
Efficiency: 85.8%
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 2.14 / 2.14 / 2.24
Luminous Opening: (L: 1.21 ' x W: 0 ' x H: 0.43 '
CIE Type: Semi-Direct

Input Watts (W): 100
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	97	97	97	97	92	92	92	92	82	82	82		74	74	74		66	66	66	62
1	83	77	72	67	78	73	68	64	65	61	57		57	54	51		50	48	46	42
2	74	64	57	50	69	61	54	48	54	48	43		47	43	39		41	38	34	31
3	66	55	46	40	61	52	44	38	45	39	34		40	35	30		35	30	27	24
4	59	47	39	32	55	45	37	30	39	33	27		34	29	24		30	25	22	19
5	54	42	33	26	50	39	31	25	34	28	23		30	25	20		26	22	18	15
6	49	37	28	22	46	35	27	21	31	24	19		27	21	17		23	19	15	13
7	46	33	25	19	42	31	23	18	27	21	16		24	19	14		21	16	13	11
8	42	30	22	16	39	28	21	16	25	19	14		22	16	13		19	15	11	9
9	39	27	19	14	37	25	18	14	23	17	12		20	15	11		18	13	10	8
10	36	25	17	13	34	23	17	12	21	15	11		18	13	10		16	12	9	7

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	59.1	0.8	0.7	0°	614	
10°-20°	185.1	2.4	2.1	5°	615	59
20°-30°	338.3	4.4	3.8	15°	648	185
30°-40°	534.2	6.9	5.9	25°	724	338
40°-50°	735.6	9.5	8.2	35°	850	534
50°-60°	893.4	11.6	9.9	45°	954	736
60°-70°	1029.0	13.3	11.4	55°	993	893
70°-80°	992.2	12.8	11.0	65°	1045	1029
80°-90°	821.7	10.6	9.1	75°	937	992
90°-100°	991.5	12.8	11.0	85°	715	620
100°-110°	847.6	11.0	9.4	90°	743	431
110°-120°	172.1	2.2	1.9	95°	942	756
120°-130°	65.9	0.9	0.7	105°	915	848
130°-140°	38.2	0.5	0.4	115°	123	172
140°-150°	16.2	0.2	0.2	125°	73	66
150°-160°	3.5	0.0	0.0	135°	48	38
160°-170°	0.3	0.0	0.0	145°	25	16
170°-180°	0.0	0.0	0.0	155°	6	3
0°-30°	582.5	7.5	6.5	165°	1	0
0°-40°	1116.8	14.5	12.4	175°	0	0
0°-60°	2745.7	35.5	30.5	180°	0	0
0°-90°	5588.6	72.4	62.1			
90°-120°	2011.2	26.0	22.3			
90°-150°	2131.4	27.6	23.7			
90°-180°	2135.0	27.6	23.7			
0°-180°	7723.9	100.0	85.8			



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CANDELA DISTRIBUTION (FULL):

	0°
0°	614
5°	615
10°	627
15°	648
20°	680
25°	724
30°	786
35°	850
40°	908
45°	954
50°	980
55°	993
60°	1016
65°	1045
70°	1040
75°	937
80°	840
85°	715
90°	743
95°	942
100°	1009
105°	915
110°	358
115°	123
120°	84
125°	73
130°	63
135°	48
140°	37
145°	25
150°	15
155°	6
160°	2
165°	1
170°	0
175°	0
180°	0

(END OF REPORT)