Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P412128

Luminaire Tested: **MRI-2ASR-4-1000-L835-HEO**

Issue Date: 10/5/2020

Report Generated By E9970913 / USPTCWHP6095502

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Test Information

Test Method:	LM-79-08
Report Number:	P412128
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2006-829-1)
Test Lab:	INNOVATION CENTER
Issue Date:	10/5/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	FAIL-SAFE
Catalog Number:	MRI-2ASR-4-1000-L835-HEO
Description:	4 FT, 2 INCH CHANNEL, HIGH EFFICIENCY LENS
Light Source:	(168) 3500K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6339.0 lumens
Efficiency:	N/A
Efficacy:	85.7 lumens/watt
Spacing Criteria (0/90/45):	1.23 / 1.17 / 1.32
Luminous Opening:	Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	74
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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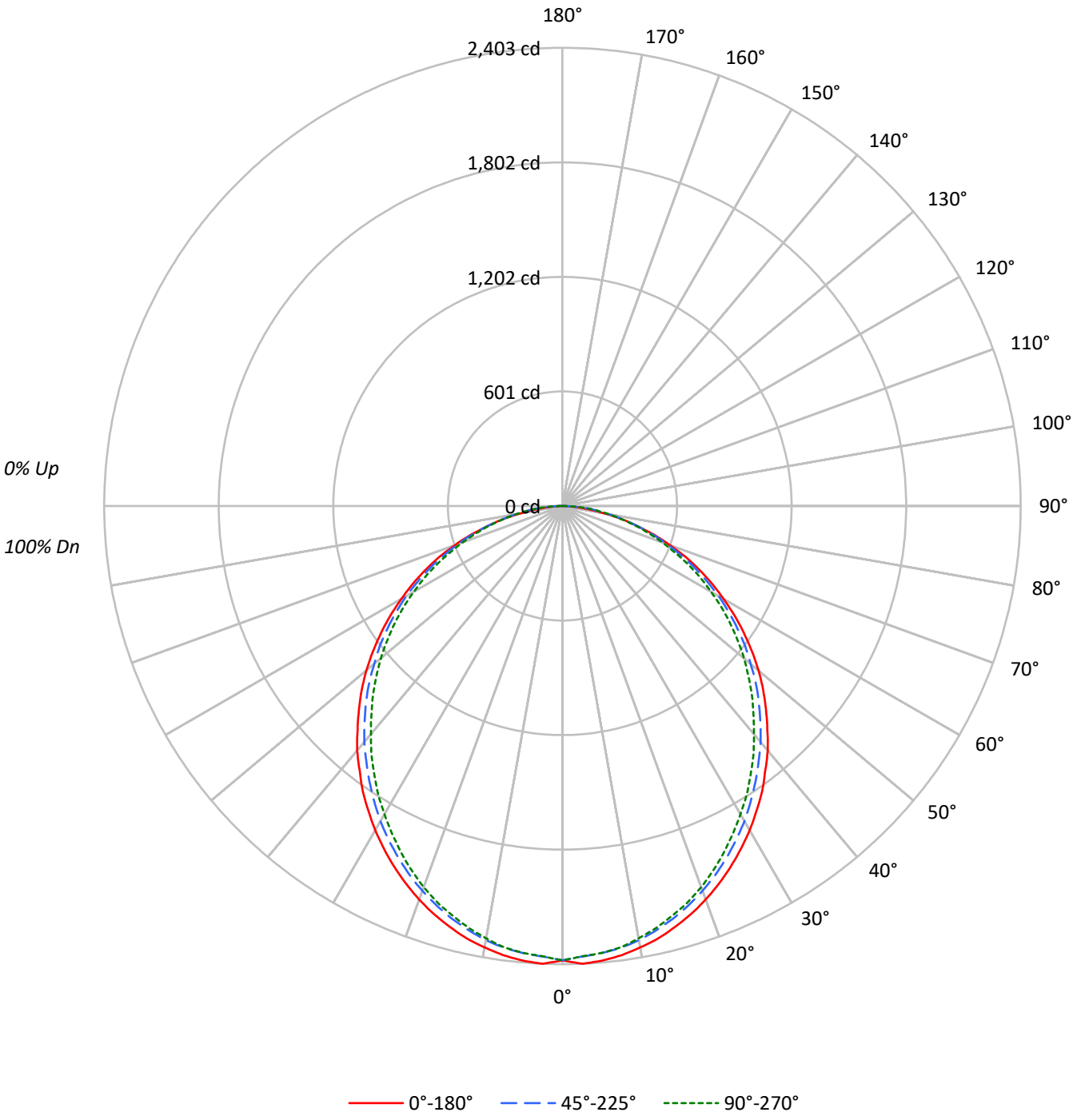
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38464	38464	38464
5°	38793	38161	38136
10°	38540	37912	37751
15°	38200	37448	37183
20°	37744	36905	36543
25°	37194	36257	35694
30°	36612	35576	34806
35°	35983	34769	33894
40°	35295	34060	32920
45°	34463	33244	32079
50°	33704	32345	31230
55°	32696	31530	30241
60°	31488	30519	29040
65°	30281	29161	27870
70°	28301	27451	26243
75°	25309	25352	24467
80°	20818	22771	22566
85°	14061	21712	22416

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.8	3.5
10°-20°	635.0	10.0
20°-30°	941.4	14.9
30°-40°	1107.1	17.5
40°-50°	1124.5	17.7
50°-60°	1000.4	15.8
60°-70°	754.4	11.9
70°-80°	428.7	6.8
80°-90°	122.8	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1801.2	28.4
0°-40°	2908.3	45.9
0°-60°	5033.2	79.4
0°-90°	6339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6339.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2382	2382	2382	2382	2382	
5°	2394	2377	2354	2372	2353	227
15°	2285	2267	2240	2248	2224	644
25°	2088	2066	2035	2028	2004	962
35°	1826	1801	1764	1741	1720	1141
45°	1509	1490	1456	1427	1405	1165
55°	1162	1149	1120	1089	1074	1038
65°	793	787	763	739	730	783
75°	406	412	406	395	392	432
85°	76	104	117	117	121	97
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*2382.3*	2382.3	2382.3	2382.3	2382.3
2.5°	*2403.3*	*2386.8*	*2365.0*	*2383.0*	*2363.5*
5°	*2393.5*	2377.0	2354.5	2371.7	2353.0
7.5°	*2376.2*	2359.7	2337.2	2353.0	2334.9
10°	*2350.7*	2335.7	2312.4	2325.2	2302.6
12.5°	*2322.9*	2303.4	2278.6	2289.8	2267.3
15°	*2285.3*	2267.3	2240.3	2248.5	2224.5
17.5°	*2244.0*	2223.0	2196.7	2201.2	2180.9
20°	*2196.7*	2175.7	2147.9	2149.4	2126.8
22.5°	*2144.1*	2124.6	2094.5	2089.3	2068.2
25°	*2087.8*	2066.0	2035.2	2027.7	2003.6
27.5°	*2026.9*	2006.6	1973.6	1961.5	1936.0
30°	*1963.8*	1939.8	1908.2	1890.2	1866.9
32.5°	*1894.7*	1872.9	1837.6	1815.0	1797.0
35°	*1825.6*	1800.8	1764.0	1741.4	1719.6
37.5°	*1747.4*	1724.1	1689.6	1667.1	1645.3
40°	*1674.6*	1649.0	1616.0	1588.2	1561.9
42.5°	*1590.4*	1572.4	1536.3	1508.5	1483.0
45°	*1509.3*	1490.5	1455.9	1426.6	1404.9
47.5°	*1427.4*	1408.6	1375.6	1344.0	1323.0
50°	*1341.8*	1321.5	1287.7	1259.9	1243.3
52.5°	*1252.4*	1238.1	1208.0	1176.5	1157.7
55°	*1161.5*	1149.4	1120.1	1088.6	1074.3
57.5°	*1069.8*	1060.0	1033.0	1002.9	988.7
60°	*975.1*	970.6	945.1	916.5	899.3
62.5°	*885.7*	879.0	852.7	831.6	815.9
65°	*792.6*	787.3	763.3	739.2	729.5
67.5°	*698.7*	692.7	670.1	653.6	638.6
70°	*599.5*	599.5	581.5	565.7	555.9
72.5°	*505.6*	506.4	494.3	477.8	473.3
75°	*405.7*	411.7	406.4	395.2	392.2
77.5°	*317.0*	322.3	323.0	319.3	314.0
80°	*223.9*	238.9	244.9	244.2	242.7
82.5°	*143.5*	167.5	178.8	178.0	179.6
85°	*75.9*	104.4	117.2	117.2	121.0
87.5°	*26.3*	53.3	57.1	52.6	50.3
90°	*0.0*	0.0	0.0	0.0	0.0

(END OF REPORT)