

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: HALO

Report Number: P328557

Luminaire Tested: **L815SML18WW940MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P328557
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-6)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L815SML18WW940MB
Description: Small, 1800lm, WW, 4000K, black finish
Light Source: (1) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

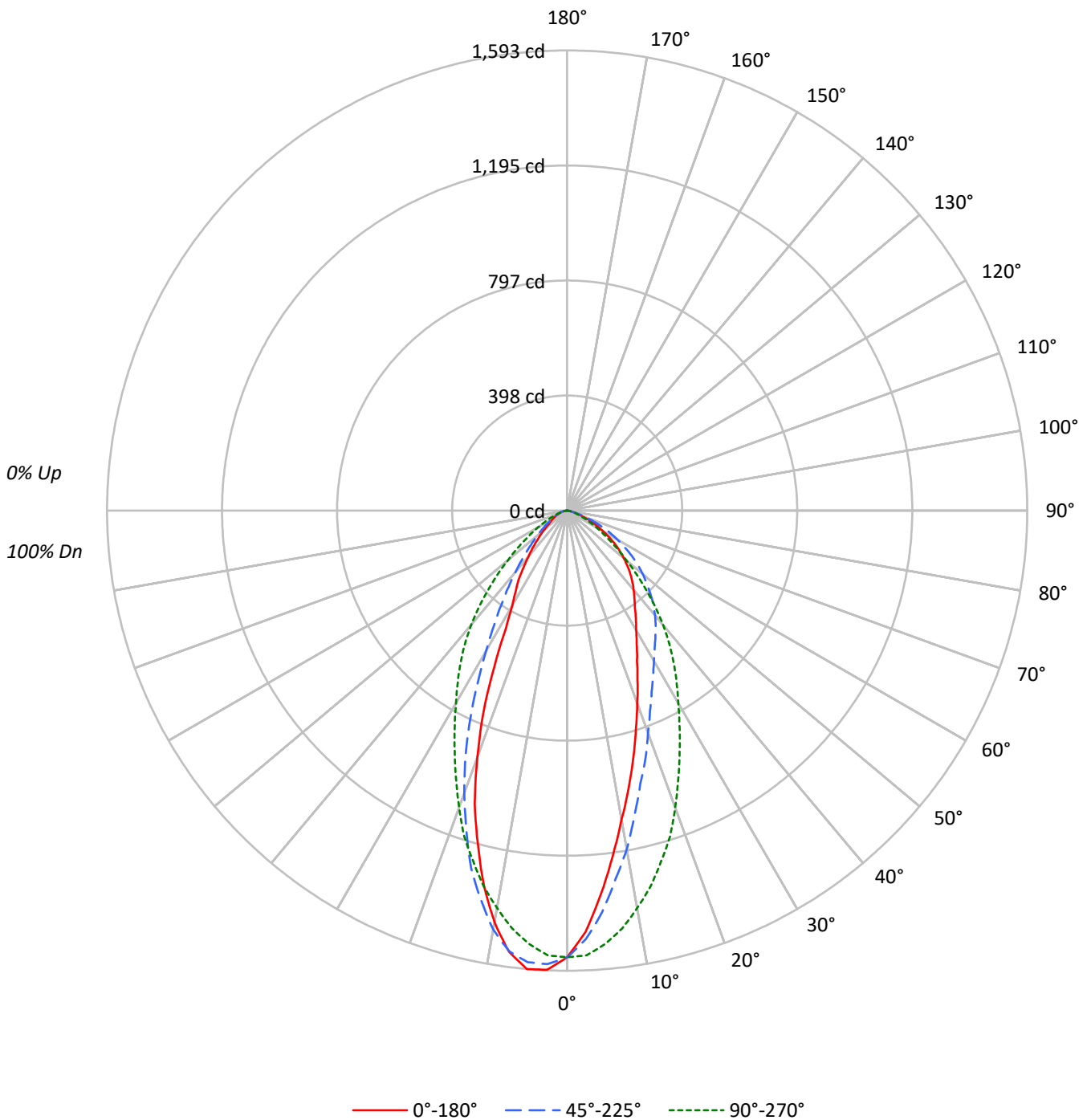
Lumens per Lamp: N/A
Luminaire Lumens: 1600.0 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 0.85 / 0.82
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	339118	339118	339118
5°	293726	331630	350714
10°	241746	311083	322261
15°	200909	285314	271080
20°	165541	255219	211838
25°	138516	222956	144323
30°	121006	194638	96167
35°	109593	172180	78461
40°	102506	147877	60084
45°	95855	119175	46330
50°	87161	91426	35410
55°	77608	68471	27908
60°	63504	51005	24516
65°	48514	37306	21896
70°	34365	24876	19747
75°	21266	16436	18385
80°	7198	11491	15785
85°	0	2768	11573



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	8.5
10°-20°	317.3	19.8
20°-30°	344.9	21.6
30°-40°	301.1	18.8
40°-50°	235.0	14.7
50°-60°	153.8	9.6
60°-70°	81.1	5.1
70°-80°	26.5	1.7
80°-90°	3.5	0.2
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°	799.0	49.9
0°-40°	1100.1	68.8
0°-60°	1488.9	93.1
0°-90°	1600.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1600.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1546	1546	1546	1546	1546	
5°	1334	1395	1507	1569	1593	120
15°	885	978	1257	1283	1194	247
25°	572	692	922	793	596	266
35°	409	533	643	397	293	258
45°	309	408	384	194	149	238
55°	203	273	179	94	73	179
65°	94	133	72	48	42	95
75°	25	24	19	24	22	28
85°	0	0	1	5	5	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1546.5	1546.5	1546.5	1546.5	1546.5	1546.5	1546.5	1546.5	1546.5
2.5°	1459.8	1471.2	1484.9	1513.4	1540.8	1557.9	1571.6	1583.0	1591.0
5°	1334.4	1367.4	1394.8	1449.6	1506.6	1547.6	1569.3	1583.0	1593.3
7.5°	1206.6	1230.6	1285.3	1376.6	1458.7	1513.4	1538.5	1546.5	1540.8
10°	1085.7	1113.1	1189.5	1289.9	1397.1	1456.4	1473.5	1464.4	1447.3
12.5°	983.1	1009.3	1078.9	1210.1	1333.2	1393.7	1380.0	1345.8	1331.0
15°	885.0	904.4	978.5	1124.5	1256.8	1303.6	1283.1	1226.0	1194.1
17.5°	791.5	812.0	901.0	1044.7	1183.8	1214.6	1159.9	1090.3	1064.1
20°	709.4	734.5	818.9	969.4	1093.7	1112.0	1041.3	964.9	907.8
22.5°	636.4	662.6	749.3	897.6	1004.8	1001.4	918.1	822.3	759.6
25°	572.5	602.2	692.3	832.6	921.5	898.7	792.6	672.9	596.5
27.5°	521.2	550.9	643.2	775.5	842.8	799.5	669.5	526.9	457.3
30°	477.9	507.5	601.0	726.5	768.7	701.4	561.1	426.5	379.8
32.5°	442.5	467.6	563.4	687.7	704.8	612.4	471.0	353.6	331.9
35°	409.4	436.8	532.6	650.1	643.2	530.3	396.9	301.1	293.1
37.5°	382.1	409.4	503.0	609.0	580.5	453.9	333.0	257.8	247.5
40°	358.1	384.3	473.3	558.8	516.6	382.1	280.6	221.3	209.9
42.5°	334.2	359.3	441.4	510.9	450.5	318.2	232.7	188.2	177.9
45°	309.1	333.0	408.3	453.9	384.3	262.3	193.9	160.8	149.4
47.5°	282.8	309.1	372.9	401.5	325.0	213.3	160.8	136.9	124.3
50°	255.5	280.6	342.1	352.4	268.0	173.4	133.4	112.9	103.8
52.5°	229.2	252.0	306.8	304.5	223.5	141.4	111.8	96.9	85.5
55°	203.0	222.4	272.6	260.0	179.1	115.2	93.5	82.1	73.0
57.5°	172.2	193.9	236.1	223.5	144.8	93.5	77.6	69.6	65.0
60°	144.8	163.1	200.7	185.9	116.3	76.4	65.0	59.3	55.9
62.5°	120.9	136.9	167.7	151.7	91.2	63.9	55.9	52.5	50.2
65°	93.5	110.6	133.4	118.6	71.9	51.3	47.9	45.6	42.2
67.5°	71.9	86.7	101.5	86.7	52.5	43.3	41.1	38.8	36.5
70°	53.6	65.0	71.9	58.2	38.8	35.4	35.4	33.1	30.8
72.5°	38.8	45.6	44.5	34.2	27.4	28.5	29.7	28.5	26.2
75°	25.1	26.2	24.0	19.4	19.4	22.8	24.0	22.8	21.7
77.5°	14.8	13.7	12.5	11.4	13.7	17.1	19.4	18.2	17.1
80°	5.7	6.8	6.8	6.8	9.1	12.5	14.8	13.7	12.5
82.5°	2.3	2.3	2.3	3.4	5.7	8.0	10.3	9.1	9.1
85°	0.0	0.0	0.0	0.0	1.1	3.4	4.6	4.6	4.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)