

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: P328475

Luminaire Tested: **L815MED20WW930MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P328475  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-14)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L815MED20WW930MB  
Description: Medium, 2000lm, WW, 3000K, black finish  
Light Source: (1) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1739.0 lumens  
Efficiency: N/A  
Efficacy: 70.4 lumens/watt  
Spacing Criteria (0/90/45): 0.44 / 0.77 / 0.63  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

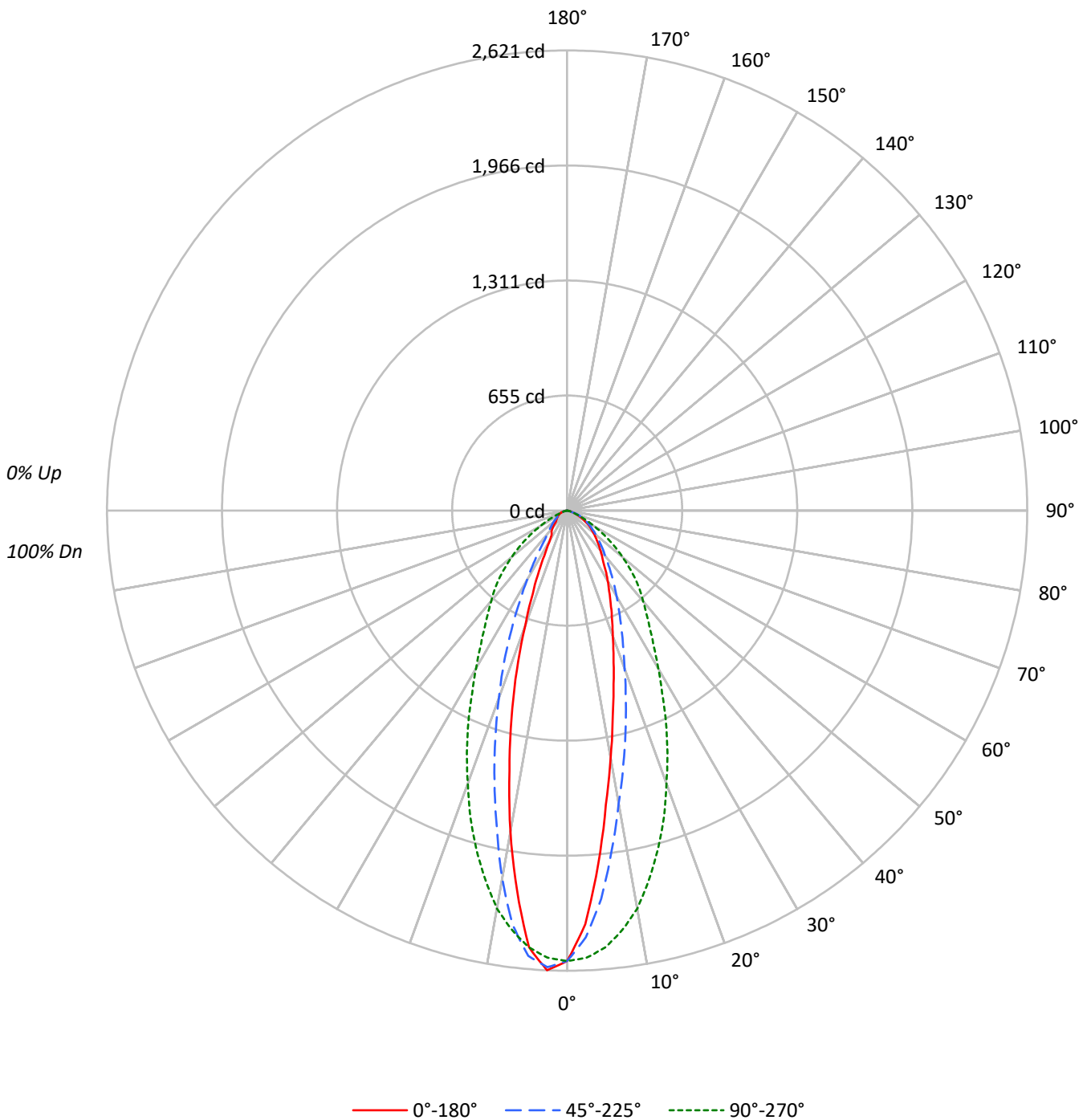
Input Watts (W): 24.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91				91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82				82
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75				75
4	93	85	78	73	91	83	77	73	81	76	72	79	75	71	77	73	70	68				68
5	88	78	72	67	86	77	71	66	75	70	66	74	69	65	72	68	65	63				63
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58				58
7	79	68	61	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				54
8	75	64	57	53	73	63	57	53	62	57	53	61	56	52	60	56	52	51				51
9	71	60	54	50	70	60	54	49	59	53	49	58	53	49	57	52	49	47				47
10	68	57	51	47	66	57	51	46	56	50	46	55	50	46	54	49	46	45				45

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	316456	316456	316456
5°	250580	309208	309096
10°	178704	288222	233100
15°	130366	255010	156122
20°	99614	217067	92041
25°	79821	181118	51594
30°	65687	147711	28158
35°	53892	123835	23400
40°	47146	108444	20819
45°	41865	95487	16031
50°	37150	78983	15294
55°	33246	61933	15053
60°	27901	43541	14851
65°	21831	28252	14710
70°	15832	13776	13488
75°	10866	8912	12391
80°	5185	6322	11010
85°	0	1132	9199



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.9	12.2
10°-20°	416.3	23.9
20°-30°	376.7	21.7
30°-40°	284.8	16.4
40°-50°	208.8	12.0
50°-60°	137.4	7.9
60°-70°	74.7	4.3
70°-80°	23.8	1.4
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°	1006.0	57.8
0°-40°	1290.7	74.2
0°-60°	1637.0	94.1
0°-90°	1739.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1739.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2566	2566	2566	2566	2566	
5°	2024	2220	2497	2546	2496	174
15°	1021	1286	1997	1598	1223	287
25°	586	724	1331	750	379	272
35°	358	435	822	271	155	229
45°	240	268	547	132	92	186
55°	155	168	288	74	70	137
65°	75	94	97	46	50	76
75°	23	16	19	23	26	24
85°	0	0	1	5	6	2
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°	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6
2.5°	2359.0	2391.5	2433.0	2494.8	2549.3	2592.4	2603.0	2615.2	2620.9
5°	2023.8	2077.5	2219.9	2377.7	2497.3	2554.2	2546.1	2523.3	2496.4
7.5°	1689.5	1748.1	1950.6	2228.0	2409.4	2464.7	2379.3	2249.2	2185.7
10°	1426.8	1504.0	1692.0	2040.1	2301.2	2337.0	2129.6	1910.8	1861.1
12.5°	1198.2	1275.5	1478.8	1840.0	2153.2	2158.1	1851.4	1611.4	1517.9
15°	1020.9	1089.2	1286.0	1645.6	1997.0	1951.4	1597.6	1318.6	1222.6
17.5°	876.9	922.4	1108.7	1447.9	1833.5	1746.5	1361.7	1059.9	951.7
20°	758.9	798.0	955.8	1276.3	1653.7	1539.8	1133.9	811.8	701.2
22.5°	667.8	696.3	833.0	1117.7	1491.8	1356.0	941.1	603.6	511.7
25°	586.5	613.3	724.0	976.1	1330.8	1195.8	750.0	436.0	379.1
27.5°	519.8	541.7	640.2	859.8	1172.2	1051.0	588.9	315.6	263.6
30°	461.2	477.5	562.9	741.9	1037.1	920.0	458.0	230.2	197.7
32.5°	410.0	420.5	496.2	646.7	919.2	809.4	354.7	189.5	163.5
35°	357.9	372.6	435.2	567.0	822.4	713.4	270.9	164.3	155.4
37.5°	325.4	333.5	383.1	496.2	741.0	617.4	208.2	147.2	144.8
40°	292.8	299.3	337.6	433.6	673.5	524.7	172.4	131.8	129.3
42.5°	266.8	270.9	301.8	384.8	611.7	429.5	149.7	117.9	110.6
45°	240.0	243.2	267.6	340.0	547.4	348.2	131.8	105.7	91.9
47.5°	216.4	218.8	237.5	304.2	479.9	278.2	116.3	92.7	84.6
50°	193.6	195.2	213.1	272.5	411.6	219.6	100.1	82.2	79.7
52.5°	173.3	174.9	188.7	246.5	349.0	174.9	85.4	73.2	75.6
55°	154.6	152.1	167.6	222.9	288.0	135.0	74.0	66.7	70.0
57.5°	133.4	132.6	147.2	200.9	229.4	103.3	65.9	61.0	65.1
60°	113.1	113.1	128.5	178.1	176.5	82.2	58.6	56.9	60.2
62.5°	95.2	94.4	110.6	156.2	135.8	65.1	52.1	52.9	55.3
65°	74.8	78.9	94.4	126.1	96.8	52.9	45.6	47.2	50.4
67.5°	58.6	63.4	77.3	85.4	65.1	42.3	39.9	41.5	44.7
70°	43.9	49.6	57.8	47.2	38.2	33.4	34.2	35.8	37.4
72.5°	32.5	37.4	30.9	25.2	26.0	26.8	28.5	30.9	32.5
75°	22.8	22.0	15.5	15.5	18.7	21.1	22.8	24.4	26.0
77.5°	12.2	11.4	8.9	10.6	13.8	16.3	17.9	19.5	20.3
80°	7.3	5.7	4.9	6.5	8.9	11.4	13.0	14.6	15.5
82.5°	3.3	2.4	1.6	2.4	4.9	6.5	8.9	10.6	11.4
85°	0.0	0.0	0.0	0.0	0.8	2.4	4.9	6.5	6.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)