

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: P328476

Luminaire Tested: **L815MED20WW935MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P328476
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: L815MED20WW935MB
Description: Medium, 2000lm, WW, 3500K, black finish
Light Source: (1) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1835.0 lumens
Efficiency: N/A
Efficacy: 74.3 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

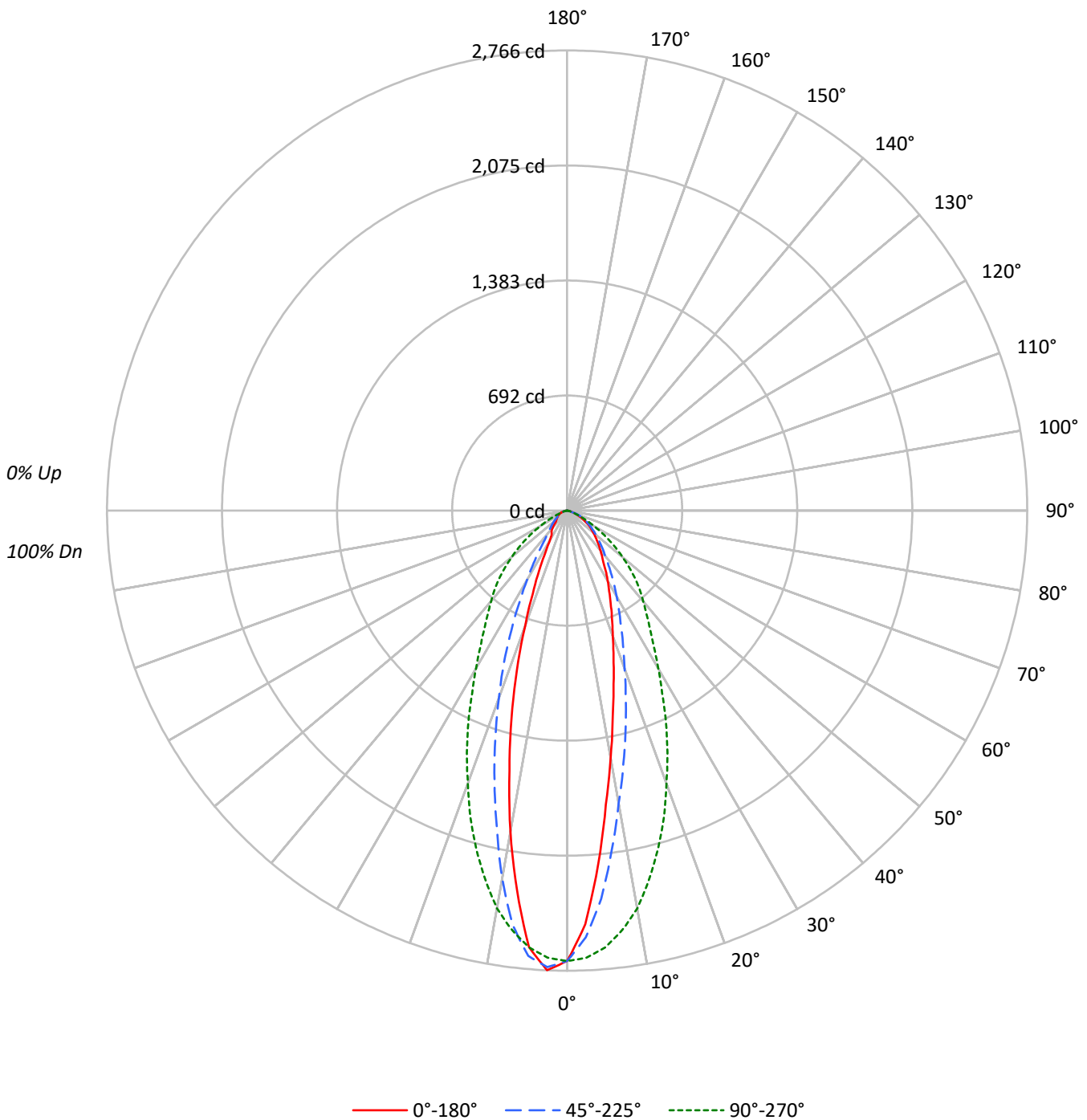
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	333921	333921	333921
5°	264423	326270	326171
10°	188562	304141	245975
15°	137555	269083	164742
20°	105114	229052	97121
25°	84230	191107	54439
30°	69319	155872	29710
35°	56873	130671	24680
40°	49754	114434	21979
45°	44167	100772	16920
50°	39203	83339	16138
55°	35074	65353	15870
60°	29430	45959	15665
65°	23057	29799	15527
70°	16734	14534	14245
75°	11438	9388	13106
80°	5469	6677	11578
85°	0	1274	9765



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.7	12.2
10°-20°	439.3	23.9
20°-30°	397.5	21.7
30°-40°	300.5	16.4
40°-50°	220.3	12.0
50°-60°	145.0	7.9
60°-70°	78.8	4.3
70°-80°	25.1	1.4
80°-90°	3.8	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°	1061.5	57.8
0°-40°	1362.0	74.2
0°-60°	1727.3	94.1
0°-90°	1835.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1835.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2707	2707	2707	2707	2707	
5°	2136	2342	2635	2687	2634	184
15°	1077	1357	2107	1686	1290	303
25°	619	764	1404	791	400	287
35°	378	459	868	286	164	241
45°	253	282	578	139	97	196
55°	163	177	304	78	74	145
65°	79	100	102	48	53	80
75°	24	16	20	24	28	26
85°	0	0	1	5	7	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°	2707.2	2707.2	2707.2	2707.2	2707.2	2707.2	2707.2	2707.2	2707.2
2.5°	2489.2	2523.5	2567.3	2632.5	2690.0	2735.5	2746.7	2759.6	2765.6
5°	2135.6	2192.2	2342.4	2508.9	2635.1	2695.2	2686.6	2662.6	2634.3
7.5°	1782.8	1844.6	2058.3	2351.0	2542.4	2600.8	2510.7	2373.3	2306.4
10°	1505.5	1587.1	1785.4	2152.7	2428.3	2466.0	2247.1	2016.2	1963.9
12.5°	1264.3	1345.9	1560.5	1941.6	2272.0	2277.2	1953.6	1700.4	1601.7
15°	1077.2	1149.3	1357.0	1736.4	2107.2	2059.2	1685.8	1391.4	1290.1
17.5°	925.3	973.4	1169.9	1527.9	1934.7	1842.9	1436.9	1118.4	1004.3
20°	800.8	842.0	1008.6	1346.7	1745.0	1624.8	1196.5	856.6	739.9
22.5°	704.7	734.7	878.9	1179.4	1574.2	1430.9	993.1	636.9	539.9
25°	618.9	647.2	763.9	1030.0	1404.2	1261.8	791.4	460.1	400.0
27.5°	548.5	571.7	675.5	907.3	1236.9	1109.0	621.4	333.0	278.1
30°	486.7	503.8	594.0	782.8	1094.4	970.8	483.2	242.9	208.6
32.5°	432.6	443.8	523.6	682.4	969.9	854.1	374.2	200.0	172.5
35°	377.7	393.1	459.2	598.3	867.8	752.8	285.8	173.4	163.9
37.5°	343.3	351.9	404.3	523.6	782.0	651.5	219.7	155.4	152.8
40°	309.0	315.9	356.2	457.5	710.7	553.6	182.0	139.1	136.5
42.5°	281.5	285.8	318.4	406.0	645.5	453.2	157.9	124.5	116.7
45°	253.2	256.6	282.4	358.8	577.7	367.4	139.1	111.6	97.0
47.5°	228.3	230.9	250.6	321.0	506.4	293.6	122.7	97.9	89.3
50°	204.3	206.0	224.9	287.5	434.3	231.8	105.6	86.7	84.1
52.5°	182.8	184.5	199.1	260.1	368.2	184.5	90.1	77.3	79.8
55°	163.1	160.5	176.8	235.2	303.9	142.5	78.1	70.4	73.8
57.5°	140.8	139.9	155.4	212.0	242.1	109.0	69.5	64.4	68.7
60°	119.3	119.3	135.6	188.0	186.3	86.7	61.8	60.1	63.5
62.5°	100.4	99.6	116.7	164.8	143.3	68.7	54.9	55.8	58.4
65°	79.0	83.3	99.6	133.0	102.1	55.8	48.1	49.8	53.2
67.5°	61.8	67.0	81.5	90.1	68.7	44.6	42.1	43.8	47.2
70°	46.4	52.4	60.9	49.8	40.3	35.2	36.1	37.8	39.5
72.5°	34.3	39.5	32.6	26.6	27.5	28.3	30.0	32.6	34.3
75°	24.0	23.2	16.3	16.3	19.7	22.3	24.0	25.8	27.5
77.5°	12.9	12.0	9.4	11.2	14.6	17.2	18.9	20.6	21.5
80°	7.7	6.0	5.2	6.9	9.4	12.0	13.7	15.5	16.3
82.5°	3.4	2.6	1.7	2.6	5.2	6.9	9.4	11.2	12.0
85°	0.0	0.0	0.0	0.0	0.9	2.6	5.2	6.9	6.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.7	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)