

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: P328555

Luminaire Tested: **L815SML18WW930MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P328555  
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: L815SML18WW930MB  
Description: Small, 1800lm, WW, 3000K, black finish  
Light Source: (1) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

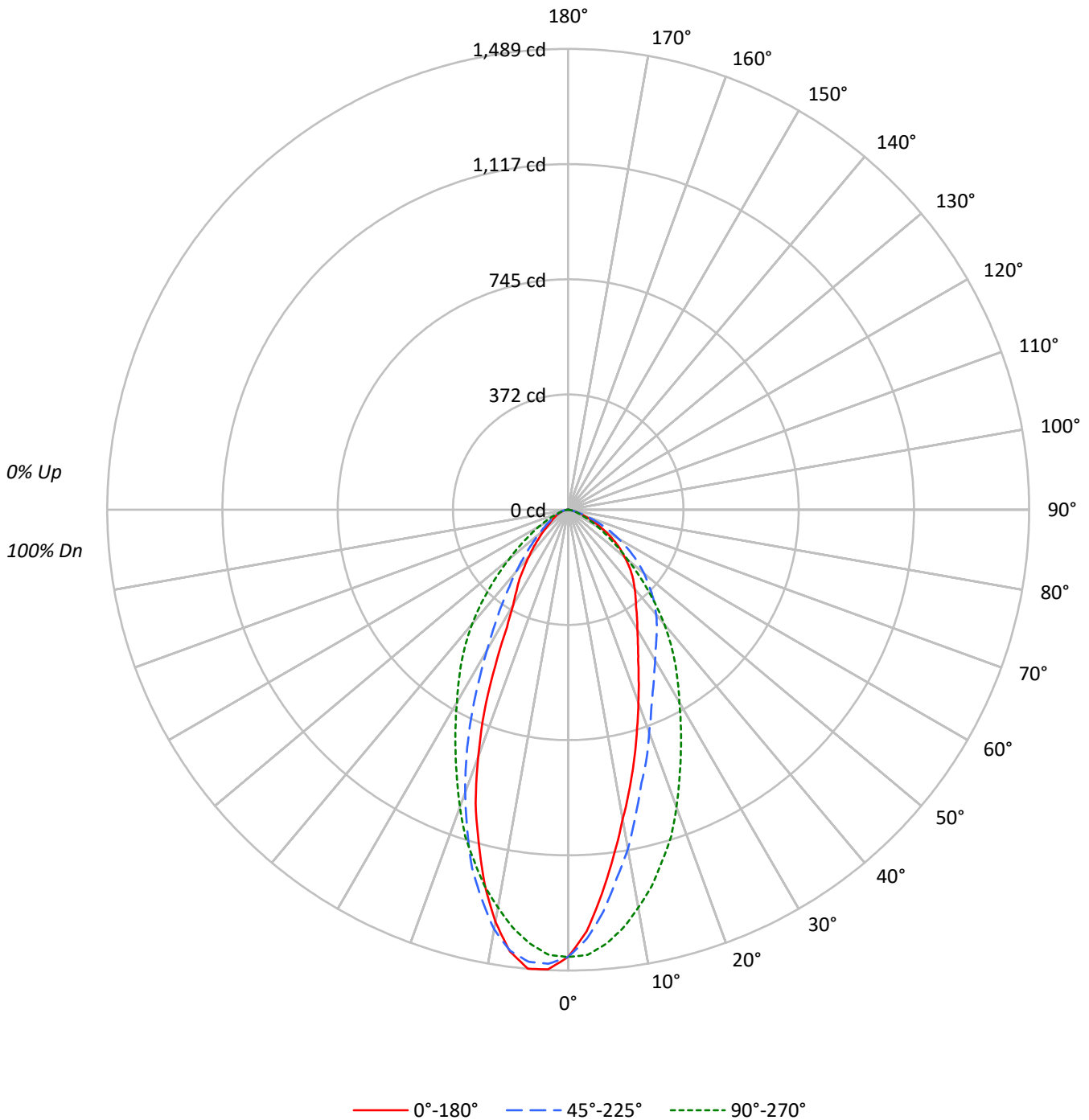
Lumens per Lamp: N/A  
Luminaire Lumens: 1495.0 lumens  
Efficiency: N/A  
Efficacy: 74.7 lumens/watt  
Spacing Criteria (0/90/45): 0.65 / 0.85 / 0.82  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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

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

	0°	90°	180°
0°	316861	316861	316861
5°	274443	309861	327690
10°	225892	290665	301108
15°	187720	266585	253282
20°	154667	238487	197954
25°	129443	208318	134838
30°	113055	181851	89862
35°	102419	160883	73321
40°	95779	138173	56134
45°	89560	111360	43291
50°	81430	85421	33091
55°	72523	63959	26073
60°	59337	47672	22893
65°	45349	34816	20443
70°	32121	23209	18465
75°	19825	15335	17114
80°	6693	10734	14775
85°	0	2768	10819



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.8	8.5
10°-20°	296.5	19.8
20°-30°	322.3	21.6
30°-40°	281.3	18.8
40°-50°	219.5	14.7
50°-60°	143.7	9.6
60°-70°	75.8	5.1
70°-80°	24.7	1.7
80°-90°	3.3	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°	746.6	49.9
0°-40°	1027.9	68.8
0°-60°	1391.2	93.1
0°-90°	1495.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1495.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1445	1445	1445	1445	1445	
5°	1247	1303	1408	1466	1489	112
15°	827	914	1174	1199	1116	230
25°	535	647	861	741	557	248
35°	383	498	601	371	274	241
45°	289	382	359	181	140	222
55°	190	255	167	87	68	168
65°	87	125	67	45	39	89
75°	23	22	18	22	20	27
85°	0	0	1	4	4	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°	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0
2.5°	1364.0	1374.7	1387.5	1414.1	1439.7	1455.7	1468.5	1479.1	1486.6
5°	1246.8	1277.7	1303.3	1354.4	1407.7	1446.1	1466.3	1479.1	1488.7
7.5°	1127.5	1149.8	1201.0	1286.2	1363.0	1414.1	1437.6	1445.0	1439.7
10°	1014.5	1040.1	1111.5	1205.2	1305.4	1360.8	1376.8	1368.3	1352.3
12.5°	918.6	943.1	1008.1	1130.7	1245.7	1302.2	1289.4	1257.5	1243.6
15°	826.9	845.1	914.3	1050.7	1174.3	1218.0	1198.9	1145.6	1115.7
17.5°	739.6	758.7	841.9	976.1	1106.1	1134.9	1083.8	1018.8	994.2
20°	662.8	686.3	765.1	905.8	1022.0	1039.0	972.9	901.5	848.3
22.5°	594.6	619.1	700.1	838.7	938.8	935.6	857.8	768.3	709.7
25°	535.0	562.7	646.8	777.9	861.0	839.7	740.6	628.7	557.3
27.5°	487.0	514.7	601.0	724.6	787.5	747.0	625.5	492.3	427.3
30°	446.5	474.2	561.6	678.8	718.2	655.4	524.3	398.6	354.9
32.5°	413.5	436.9	526.4	642.6	658.6	572.3	440.1	330.4	310.1
35°	382.6	408.1	497.7	607.4	601.0	495.5	370.8	281.3	273.9
37.5°	357.0	382.6	470.0	569.1	542.4	424.1	311.2	240.8	231.2
40°	334.6	359.1	442.2	522.2	482.7	357.0	262.1	206.7	196.1
42.5°	312.2	335.7	412.4	477.4	420.9	297.3	217.4	175.8	166.2
45°	288.8	311.2	381.5	424.1	359.1	245.1	181.2	150.3	139.6
47.5°	264.3	288.8	348.5	375.1	303.7	199.3	150.3	127.9	116.2
50°	238.7	262.1	319.7	329.3	250.4	162.0	124.7	105.5	97.0
52.5°	214.2	235.5	286.7	284.5	208.9	132.1	104.4	90.6	79.9
55°	189.7	207.8	254.7	243.0	167.3	107.6	87.4	76.7	68.2
57.5°	160.9	181.2	220.6	208.9	135.3	87.4	72.5	65.0	60.7
60°	135.3	152.4	187.6	173.7	108.7	71.4	60.7	55.4	52.2
62.5°	113.0	127.9	156.7	141.7	85.3	59.7	52.2	49.0	46.9
65°	87.4	103.4	124.7	110.8	67.1	48.0	44.8	42.6	39.4
67.5°	67.1	81.0	94.8	81.0	49.0	40.5	38.4	36.2	34.1
70°	50.1	60.7	67.1	54.3	36.2	33.0	33.0	30.9	28.8
72.5°	36.2	42.6	41.6	32.0	25.6	26.6	27.7	26.6	24.5
75°	23.4	24.5	22.4	18.1	18.1	21.3	22.4	21.3	20.2
77.5°	13.9	12.8	11.7	10.7	12.8	16.0	18.1	17.1	16.0
80°	5.3	6.4	6.4	6.4	8.5	11.7	13.9	12.8	11.7
82.5°	2.1	2.1	2.1	3.2	5.3	7.5	9.6	8.5	8.5
85°	0.0	0.0	0.0	0.0	1.1	3.2	4.3	4.3	4.3
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)