

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: P328669

Luminaire Tested: **L815SQ20SP940MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P328669
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-22)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L815SQ20SP940MB
Description: Square Track 13x1, 2000lm, 15°, 4000K, black finish
Light Source: (13) 4000K CCT, 92 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

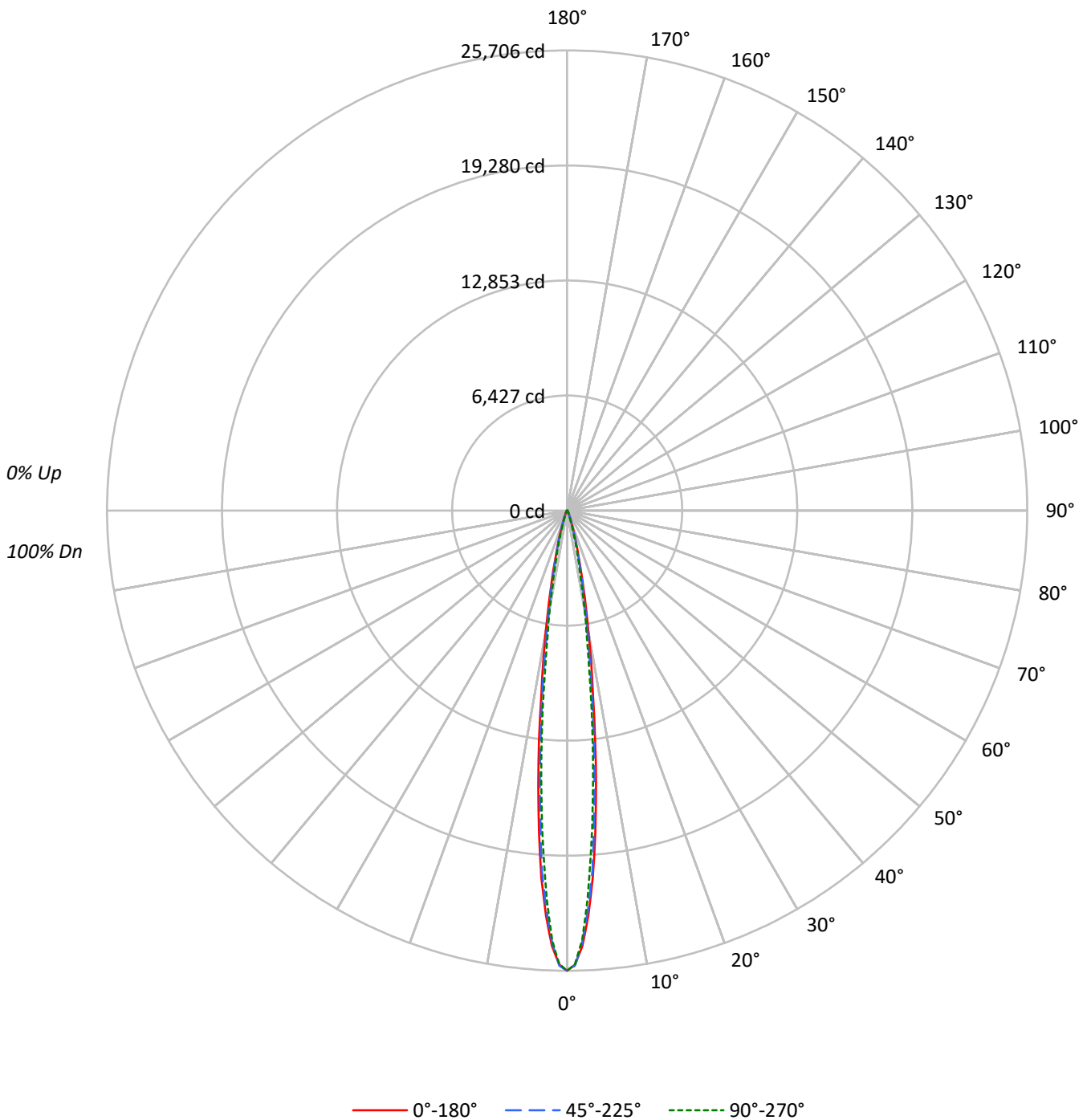
Lumens per Lamp: N/A
Luminaire Lumens: 2107.0 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 0.24 / 0.22 / 0.24
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
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	115	114	112	110	113	111	110	109	107	106	105	104	103	102	100	100	99	98
2	112	109	106	104	110	107	105	103	104	102	101	101	100	99	99	98	97	95
3	109	105	102	99	108	104	101	99	101	99	97	99	97	96	97	96	94	93
4	107	102	98	96	105	101	98	95	99	96	94	97	95	93	96	94	92	91
5	104	99	96	93	103	98	95	93	97	94	92	95	93	91	94	92	90	89
6	102	97	93	91	101	96	93	90	95	92	90	94	91	89	93	90	89	88
7	100	95	91	89	99	94	91	88	93	90	88	92	90	88	91	89	87	86
8	98	93	89	87	97	92	89	87	91	89	86	91	88	86	90	88	86	85
9	96	91	88	85	96	91	87	85	90	87	85	89	87	85	89	86	85	84
10	95	89	86	84	94	89	86	84	89	86	84	88	85	84	87	85	83	83

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2490309	2490309	2490309
5°	1759171	1672788	1595866
10°	674719	612549	547792
15°	207606	190546	154351
20°	64577	64000	45495
25°	26584	24189	20192
30°	15057	12965	11925
35°	9946	8846	8184
40°	7335	6627	6146
45°	5891	5384	5124
50°	5079	4793	4506
55°	4729	4425	4104
60°	4340	3991	3991
65°	3851	3438	3438
70°	3172	3172	3172
75°	2096	2096	2096
80°	0	1060	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1265.2	60.0
10°-20°	598.7	28.4
20°-30°	118.0	5.6
30°-40°	49.1	2.3
40°-50°	31.2	1.5
50°-60°	23.1	1.1
60°-70°	16.0	0.8
70°-80°	5.6	0.3
80°-90°	0.1	0.0
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°	1981.9	94.1
0°-40°	2031.0	96.4
0°-60°	2085.2	99.0
0°-90°	2107.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2107.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	25706	25706	25706	25706	25706	
5°	18090	17972	17202	16880	16411	1331
15°	2070	2053	1900	1681	1539	666
25°	249	243	226	200	189	131
35°	84	80	75	71	69	55
45°	43	41	39	37	37	34
55°	28	26	26	24	24	25
65°	17	17	15	17	15	17
75°	6	6	6	6	6	6
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	25706.3	25706.3	25706.3	25706.3	25706.3
1°	25358.5	25476.3	25423.9	25336.0	25336.0
2°	24331.9	24410.4	24137.4	23991.5	23999.0
3°	22654.5	22701.3	22286.1	22082.3	21728.9
4°	20580.7	20526.5	20176.8	19681.3	19120.3
5°	18090.0	17972.2	17201.7	16880.1	16410.7
6°	15425.3	15429.0	14658.6	14099.5	13843.3
7°	12833.5	12624.1	11922.8	11313.2	11225.3
8°	10408.2	10253.0	9789.2	9131.0	8697.2
9°	8588.7	8274.6	7683.7	7132.0	6963.7
10°	6859.0	6550.5	6227.0	5750.1	5568.7
11°	5551.9	5297.6	4934.8	4437.4	4280.3
12°	4310.2	4211.1	3883.9	3551.0	3347.2
13°	3446.3	3326.7	3115.3	2748.8	2672.2
14°	2655.3	2636.6	2462.7	2148.6	2021.4
15°	2070.0	2053.2	1899.9	1681.1	1539.0
17.5°	1116.4	1148.2	1112.6	895.7	817.2
20°	626.4	641.4	620.8	504.9	441.3
22.5°	374.0	379.6	357.2	302.9	282.4
25°	248.7	243.1	226.3	200.1	188.9
27.5°	181.4	175.8	157.1	142.1	138.4
30°	134.6	125.3	115.9	108.5	106.6
32.5°	104.7	99.1	91.6	86.0	86.0
35°	84.1	80.4	74.8	71.1	69.2
37.5°	71.1	67.3	61.7	59.8	58.0
40°	58.0	56.1	52.4	50.5	48.6
42.5°	50.5	46.7	44.9	43.0	43.0
45°	43.0	41.1	39.3	37.4	37.4
47.5°	37.4	35.5	35.5	33.7	33.7
50°	33.7	31.8	31.8	29.9	29.9
52.5°	29.9	29.9	28.0	28.0	26.2
55°	28.0	26.2	26.2	24.3	24.3
57.5°	24.3	24.3	22.4	22.4	22.4
60°	22.4	20.6	20.6	20.6	20.6
62.5°	20.6	18.7	18.7	18.7	18.7
65°	16.8	16.8	15.0	16.8	15.0
67.5°	15.0	15.0	13.1	13.1	13.1
70°	11.2	11.2	11.2	11.2	11.2
72.5°	7.5	7.5	7.5	7.5	7.5
75°	5.6	5.6	5.6	5.6	5.6
77.5°	3.7	1.9	3.7	1.9	1.9
80°	0.0	0.0	1.9	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)