

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: P328663

Luminaire Tested: **L815SQ20NF930MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P328663  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L815SQ20NF930MB  
Description: Square Track 13x1, 2000lm, 22°, 3000K, black finish  
Light Source: (13) 3000K CCT, 92 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

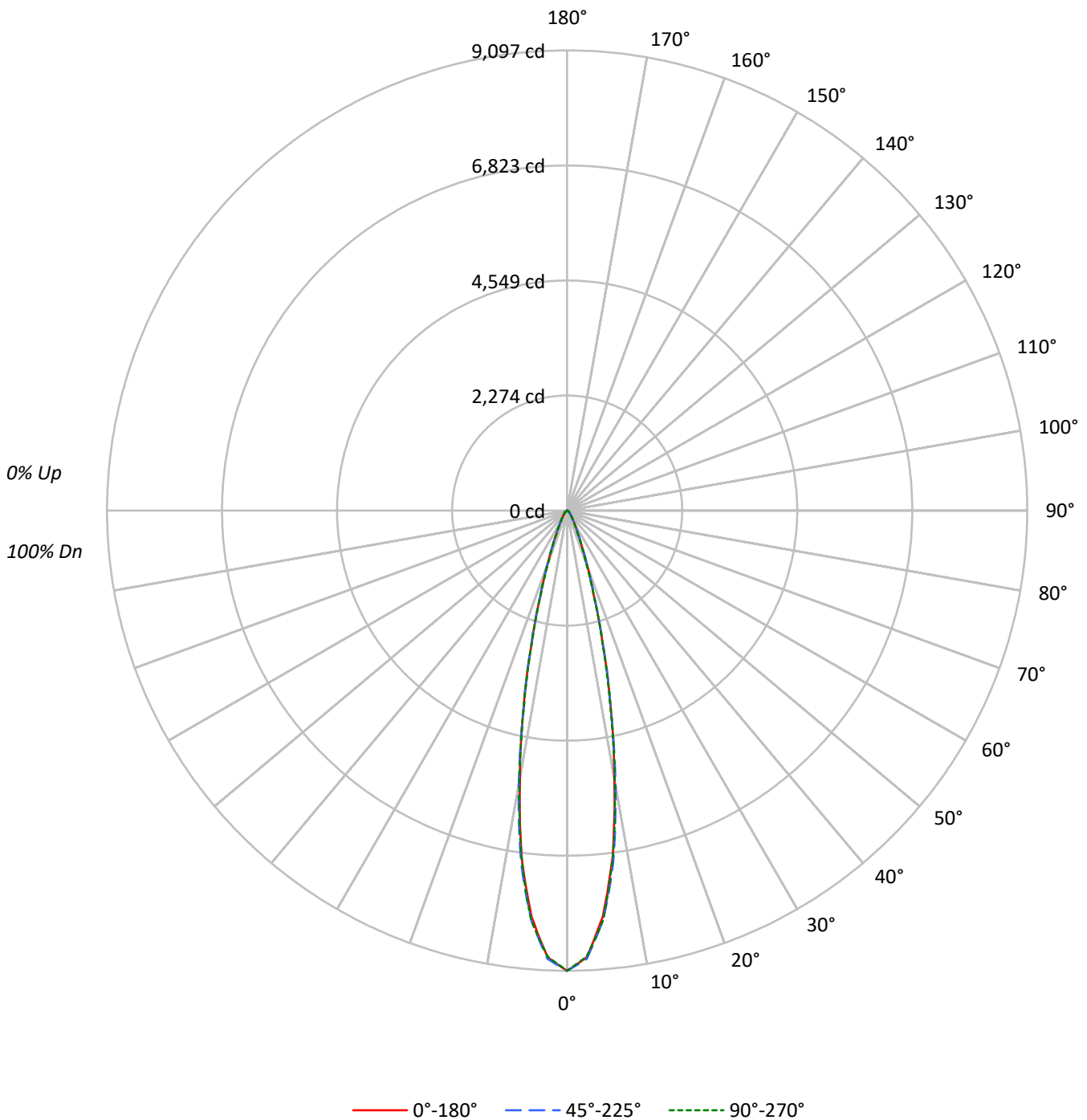
Lumens per Lamp: N/A  
Luminaire Lumens: 1949.0 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.39  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P328663  
CATALOG NUMBER: L815SQ20NF930MB

### Luminous Intensity Polar Plot





TEST NUMBER: P328663

CATALOG NUMBER: L815SQ20NF930MB

**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	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96				96
2	110	106	103	100	108	105	102	99	102	99	97	99	97	95	96	94	93	92				92
3	106	101	97	94	105	100	96	93	97	94	92	95	93	91	93	91	89	88				88
4	103	97	92	89	101	96	92	89	94	90	88	92	89	87	90	88	86	84				84
5	99	93	88	85	98	92	88	85	90	87	84	89	86	83	87	85	83	81				81
6	96	89	85	82	95	89	84	81	87	84	81	86	83	80	85	82	80	79				79
7	93	86	82	79	92	86	81	78	85	81	78	84	80	78	83	80	77	76				76
8	91	83	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74				74
9	88	81	77	74	87	80	76	73	80	76	73	79	75	73	78	75	73	72				72
10	86	79	74	71	85	78	74	71	77	74	71	77	73	71	76	73	71	70				70

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

	0°	45°	90°
0°	881315	881315	881315
5°	783672	790703	791500
10°	529191	541516	534906
15°	271041	272476	270941
20°	118103	118412	111381
25°	53659	54535	51917
30°	29621	30180	28928
35°	19147	19029	18662
40°	13392	13392	13266
45°	10467	10467	10330
50°	8741	8741	8591
55°	7398	7735	7398
60°	6510	6704	6510
65°	5593	5364	5593
70°	4334	4334	4334
75°	2658	2658	2658
80°	558	558	558
85°	0	0	0



TEST NUMBER: P328663

CATALOG NUMBER: L815SQ20NF930MB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	688.7	35.3
10°-20°	768.0	39.4
20°-30°	255.6	13.1
30°-40°	104.6	5.4
40°-50°	59.9	3.1
50°-60°	40.3	2.1
60°-70°	24.0	1.2
70°-80°	7.8	0.4
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°	1712.3	87.9
0°-40°	1816.9	93.2
0°-60°	1917.1	98.4
0°-90°	1949.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1949.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9097	9097	9097	9097	9097	
5°	8059	8094	8131	8112	8139	684
15°	2702	2691	2717	2716	2702	765
25°	502	506	510	497	486	257
35°	162	162	161	157	158	105
45°	76	75	76	75	75	60
55°	44	45	46	45	44	40
65°	24	24	23	24	24	24
75°	7	7	7	7	7	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P328663

CATALOG NUMBER: L815SQ20NF930MB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9097.4	9097.4	9097.4	9097.4	9097.4
2.5°	8839.8	8857.1	8871.3	8870.3	8826.5
5°	8058.7	8094.4	8131.0	8111.7	8139.2
7.5°	6893.8	6927.4	7002.8	6907.1	6922.3
10°	5379.6	5439.7	5504.9	5473.3	5437.7
12.5°	3981.5	4005.9	3959.1	3984.6	3926.5
15°	2702.5	2691.3	2716.8	2715.8	2701.5
17.5°	1738.2	1751.5	1768.8	1755.5	1729.1
20°	1145.6	1139.5	1148.6	1120.1	1080.4
22.5°	754.6	757.6	759.6	728.1	727.1
25°	502.0	506.1	510.2	496.9	485.7
27.5°	357.4	361.5	363.5	361.5	347.2
30°	264.8	270.9	269.8	262.7	258.6
32.5°	206.7	204.7	205.7	201.6	202.6
35°	161.9	161.9	160.9	156.8	157.8
37.5°	129.3	129.3	128.3	128.3	126.3
40°	105.9	105.9	105.9	104.9	104.9
42.5°	89.6	88.6	88.6	88.6	87.6
45°	76.4	75.4	76.4	75.4	75.4
47.5°	66.2	66.2	66.2	65.2	65.2
50°	58.0	58.0	58.0	57.0	57.0
52.5°	50.9	50.9	51.9	50.9	50.9
55°	43.8	44.8	45.8	44.8	43.8
57.5°	38.7	38.7	40.7	38.7	37.7
60°	33.6	33.6	34.6	33.6	33.6
62.5°	28.5	28.5	29.5	28.5	28.5
65°	24.4	24.4	23.4	24.4	24.4
67.5°	19.3	19.3	19.3	20.4	19.3
70°	15.3	15.3	15.3	15.3	15.3
72.5°	10.2	11.2	11.2	11.2	10.2
75°	7.1	7.1	7.1	7.1	7.1
77.5°	3.1	3.1	4.1	3.1	3.1
80°	1.0	1.0	1.0	1.0	1.0
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
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)