

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: CORELITE

Report Number: P233371

Luminaire Tested: **HGL-S-FR-50L840-UNV-8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233371  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-204-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: HGL-S-FR-50L840-UNV-8  
Description: HUGO 8 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS  
Light Source: (336) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9598.3 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 8' x H: 0.01')  
CIE Type: Direct

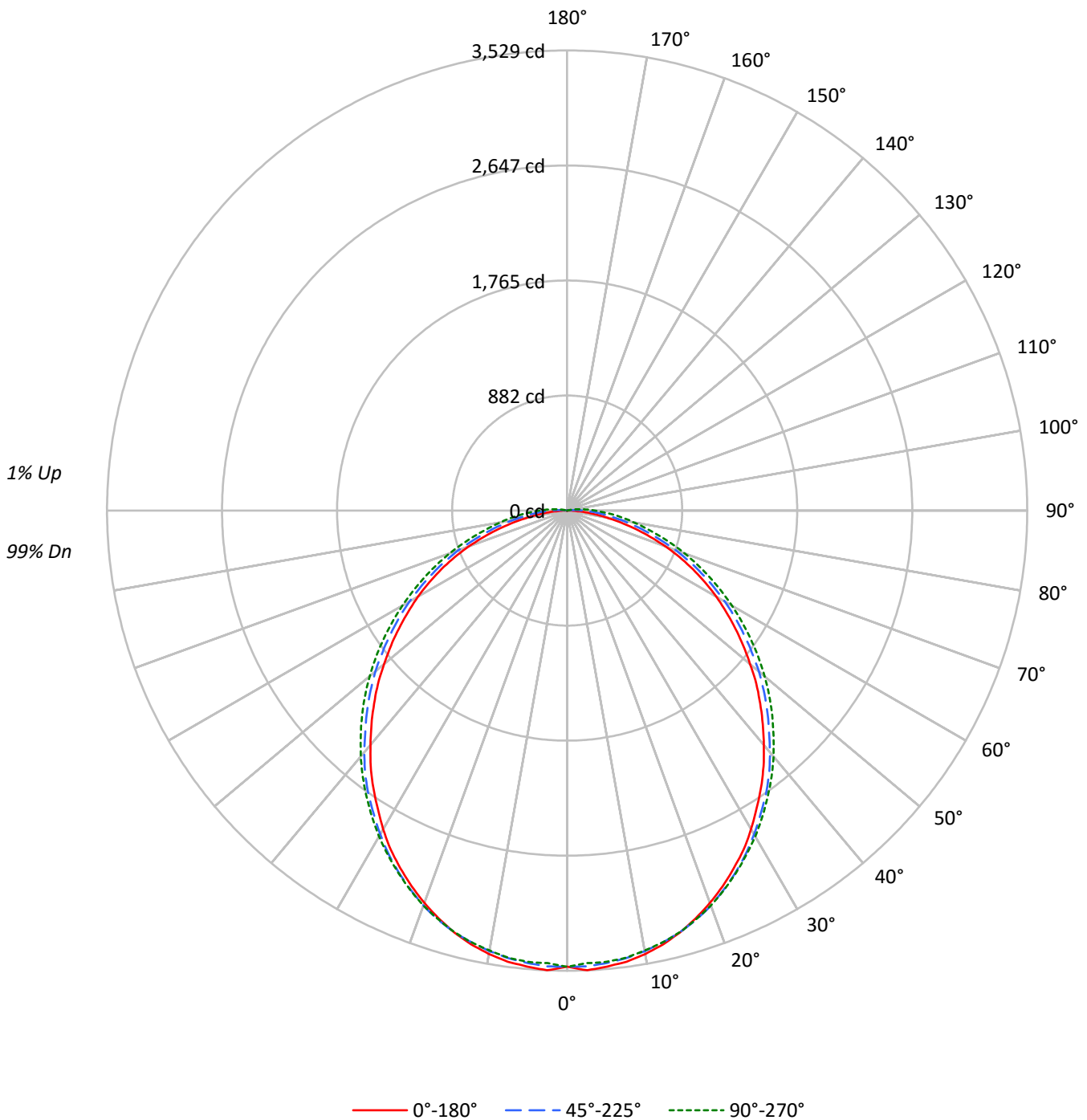
Input Watts (W): 74.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	101	101	99
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	82
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	55	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	43	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	33	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	20538	20538	20538
5°	20686	20470	20395
10°	20578	20341	20263
15°	20348	20165	20101
20°	20000	19912	19827
25°	19590	19530	19462
30°	19115	19089	19082
35°	18570	18631	18650
40°	17964	18062	18204
45°	17360	17460	17697
50°	16702	16895	17170
55°	16097	16202	16560
60°	15495	15567	15935
65°	14734	14784	15290
70°	13710	13953	14666
75°	12247	12855	13970
80°	10334	12135	14040
85°	8295	12501	15749



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.6	3.4
10°-20°	940.6	9.8
20°-30°	1400.8	14.6
30°-40°	1648.6	17.2
40°-50°	1665.1	17.3
50°-60°	1475.6	15.4
60°-70°	1122.8	11.7
70°-80°	674.1	7.0
80°-90°	277.0	2.9
90°-100°	60.3	0.6
100°-110°	2.9	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°	2672.0	27.8
0°-40°	4320.6	45.0
0°-60°	7461.4	77.7
0°-90°	9535.2	99.3
90°-120°	63.2	0.7
90°-150°	63.2	0.7
90°-180°	63.0	0.7
0°-180°	9598.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3498	3498	3498	3498	3498	
5°	3510	3471	3483	3477	3474	333
15°	3349	3315	3346	3343	3346	943
25°	3026	3001	3059	3056	3065	1393
35°	2593	2584	2657	2669	2682	1621
45°	2093	2102	2170	2200	2224	1615
55°	1575	1597	1655	1697	1719	1409
65°	1063	1079	1137	1182	1204	1051
75°	542	567	634	698	716	576
85°	125	164	253	326	350	140
90°	3	52	125	189	213	8
95°	0	3	46	91	110	0
105°	3	0	0	0	3	2
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3498.1	3498.1	3498.1	3498.1	3498.1
2.5°	3528.6	3488.9	3498.1	3492.0	3473.7
5°	3510.3	3470.7	3482.8	3476.8	3473.7
7.5°	3488.9	3449.3	3461.5	3455.4	3458.5
10°	3452.4	3412.8	3431.0	3425.0	3425.0
12.5°	3406.7	3373.2	3391.4	3385.3	3391.4
15°	3348.8	3315.3	3345.7	3342.7	3345.7
17.5°	3278.7	3248.2	3290.9	3284.8	3287.8
20°	3202.5	3172.0	3223.8	3211.7	3223.8
22.5°	3117.2	3092.8	3144.6	3135.5	3147.7
25°	3025.8	3001.4	3059.3	3056.3	3065.4
27.5°	2931.3	2910.0	2967.9	2974.0	2977.0
30°	2821.6	2806.4	2867.3	2876.5	2885.6
32.5°	2705.8	2696.7	2760.7	2775.9	2785.1
35°	2593.1	2583.9	2657.1	2669.3	2681.5
37.5°	2474.3	2468.2	2544.3	2556.5	2574.8
40°	2346.3	2349.3	2419.4	2440.7	2462.1
42.5°	2221.3	2227.4	2291.4	2321.9	2343.2
45°	2093.4	2102.5	2169.5	2200.0	2224.4
47.5°	1968.4	1977.6	2044.6	2078.1	2102.5
50°	1831.3	1852.6	1919.7	1950.2	1977.6
52.5°	1703.3	1724.7	1785.6	1825.2	1849.6
55°	1575.4	1596.7	1654.6	1697.2	1718.6
57.5°	1444.3	1474.8	1526.6	1569.3	1590.6
60°	1322.4	1340.7	1398.6	1441.3	1459.6
62.5°	1191.4	1209.7	1264.6	1316.4	1328.5
65°	1063.4	1078.7	1136.6	1182.3	1203.6
67.5°	932.4	950.7	1008.6	1057.3	1078.7
70°	801.4	819.7	883.7	938.5	956.8
72.5°	667.3	688.6	752.6	816.6	838.0
75°	542.4	566.8	633.8	697.8	716.1
77.5°	420.5	451.0	524.1	591.1	615.5
80°	307.8	344.3	423.5	496.7	518.0
82.5°	210.3	249.9	332.1	408.3	435.7
85°	124.9	164.5	252.9	326.0	350.4
87.5°	54.8	97.5	182.8	252.9	274.2
90°	3.0	51.8	124.9	188.9	213.3
92.5°	0.0	21.3	79.2	134.1	158.4
95°	0.0	3.0	45.7	91.4	109.7
97.5°	0.0	0.0	21.3	54.8	70.1
100°	0.0	0.0	3.0	27.4	39.6
102.5°	3.0	0.0	0.0	6.1	15.2
105°	3.0	0.0	0.0	0.0	3.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)