

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: P231403

Luminaire Tested: **HGL-S-FR-80L840-UNV-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231403
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-80L840-UNV-4
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

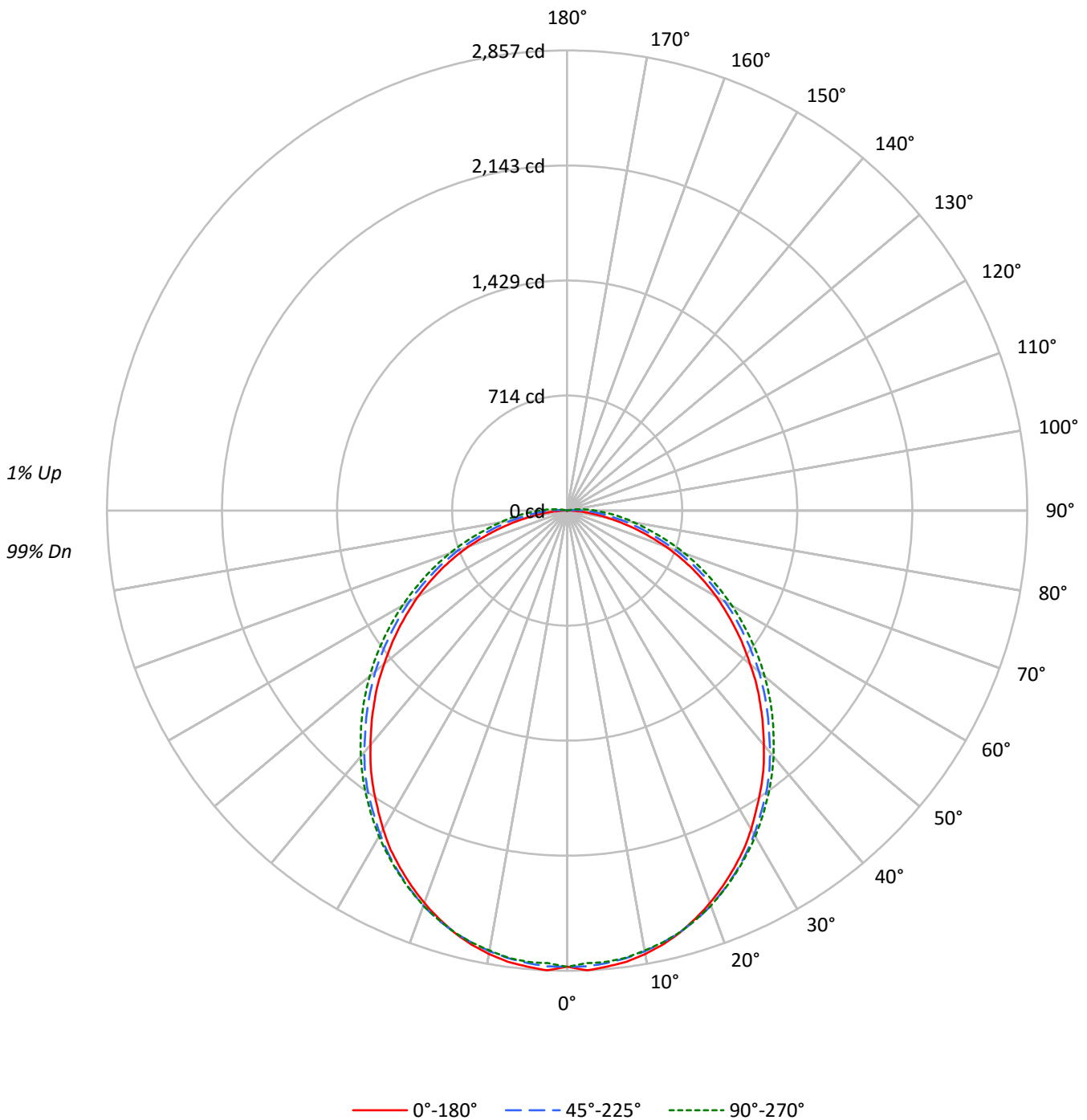
Lumens per Lamp: N/A
Luminaire Lumens: 7771.4 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 4' x H: 0.01')
CIE Type: Direct

Input Watts (W): 70.9
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°	33257	33257	33257
5°	33493	33144	33026
10°	33314	32934	32812
15°	32940	32646	32551
20°	32372	32234	32107
25°	31703	31612	31515
30°	30931	30895	30901
35°	30043	30150	30200
40°	29059	29227	29477
45°	28076	28249	28657
50°	27005	27331	27805
55°	26020	26204	26814
60°	25037	25172	25802
65°	23795	23896	24760
70°	22123	22544	23750
75°	19738	20756	22621
80°	16616	19567	22734
85°	13256	20098	25503



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.7	3.4
10°-20°	761.6	9.8
20°-30°	1134.2	14.6
30°-40°	1334.8	17.2
40°-50°	1348.2	17.3
50°-60°	1194.7	15.4
60°-70°	909.0	11.7
70°-80°	545.8	7.0
80°-90°	224.3	2.9
90°-100°	48.8	0.6
100°-110°	2.4	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°	2163.4	27.8
0°-40°	3498.2	45.0
0°-60°	6041.2	77.7
0°-90°	7720.2	99.3
90°-120°	51.2	0.7
90°-150°	51.2	0.7
90°-180°	51.0	0.7
0°-180°	7771.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2832	2832	2832	2832	2832	
5°	2842	2810	2820	2815	2812	270
15°	2711	2684	2709	2706	2709	764
25°	2450	2430	2477	2474	2482	1128
35°	2100	2092	2151	2161	2171	1312
45°	1695	1702	1757	1781	1801	1308
55°	1276	1293	1340	1374	1391	1140
65°	861	873	920	957	974	851
75°	439	459	513	565	580	466
85°	101	133	205	264	284	114
90°	2	42	101	153	173	7
95°	0	2	37	74	89	0
105°	2	0	0	0	2	1
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°	2832.2	2832.2	2832.2	2832.2	2832.2
2.5°	2856.9	2824.8	2832.2	2827.3	2812.5
5°	2842.1	2810.0	2819.9	2815.0	2812.5
7.5°	2824.8	2792.8	2802.6	2797.7	2800.2
10°	2795.2	2763.2	2778.0	2773.0	2773.0
12.5°	2758.2	2731.1	2745.9	2741.0	2745.9
15°	2711.4	2684.2	2708.9	2706.4	2708.9
17.5°	2654.6	2629.9	2664.5	2659.5	2662.0
20°	2592.9	2568.3	2610.2	2600.3	2610.2
22.5°	2523.9	2504.1	2546.1	2538.7	2548.5
25°	2449.8	2430.1	2477.0	2474.5	2481.9
27.5°	2373.4	2356.1	2403.0	2407.9	2410.4
30°	2284.5	2272.2	2321.5	2329.0	2336.4
32.5°	2190.8	2183.4	2235.2	2247.5	2254.9
35°	2099.5	2092.1	2151.3	2161.2	2171.1
37.5°	2003.3	1998.4	2060.0	2069.9	2084.7
40°	1899.7	1902.1	1958.9	1976.2	1993.4
42.5°	1798.5	1803.5	1855.3	1879.9	1897.2
45°	1694.9	1702.3	1756.6	1781.3	1801.0
47.5°	1593.8	1601.2	1655.4	1682.6	1702.3
50°	1482.7	1500.0	1554.3	1578.9	1601.2
52.5°	1379.1	1396.4	1445.7	1477.8	1497.5
55°	1275.5	1292.8	1339.6	1374.2	1391.4
57.5°	1169.4	1194.1	1236.0	1270.6	1287.8
60°	1070.7	1085.5	1132.4	1166.9	1181.7
62.5°	964.6	979.4	1023.9	1065.8	1075.7
65°	861.0	873.4	920.2	957.2	974.5
67.5°	754.9	769.7	816.6	856.1	873.4
70°	648.8	663.7	715.5	759.9	774.7
72.5°	540.3	557.6	609.4	661.2	678.5
75°	439.1	458.9	513.2	565.0	579.8
77.5°	340.5	365.1	424.3	478.6	498.4
80°	249.2	278.8	342.9	402.1	419.4
82.5°	170.2	202.3	268.9	330.6	352.8
85°	101.2	133.2	204.8	264.0	283.7
87.5°	44.4	78.9	148.0	204.8	222.0
90°	2.5	41.9	101.2	153.0	172.7
92.5°	0.0	17.3	64.1	108.6	128.3
95°	0.0	2.5	37.0	74.0	88.8
97.5°	0.0	0.0	17.3	44.4	56.7
100°	0.0	0.0	2.5	22.2	32.1
102.5°	2.5	0.0	0.0	4.9	12.3
105°	2.5	0.0	0.0	0.0	2.5
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)