

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: P231402

Luminaire Tested: **HGL-S-FR-60L840-UNV-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231402
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-60L840-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: 5798.9 lumens
Efficiency: N/A
Efficacy: 121.8 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

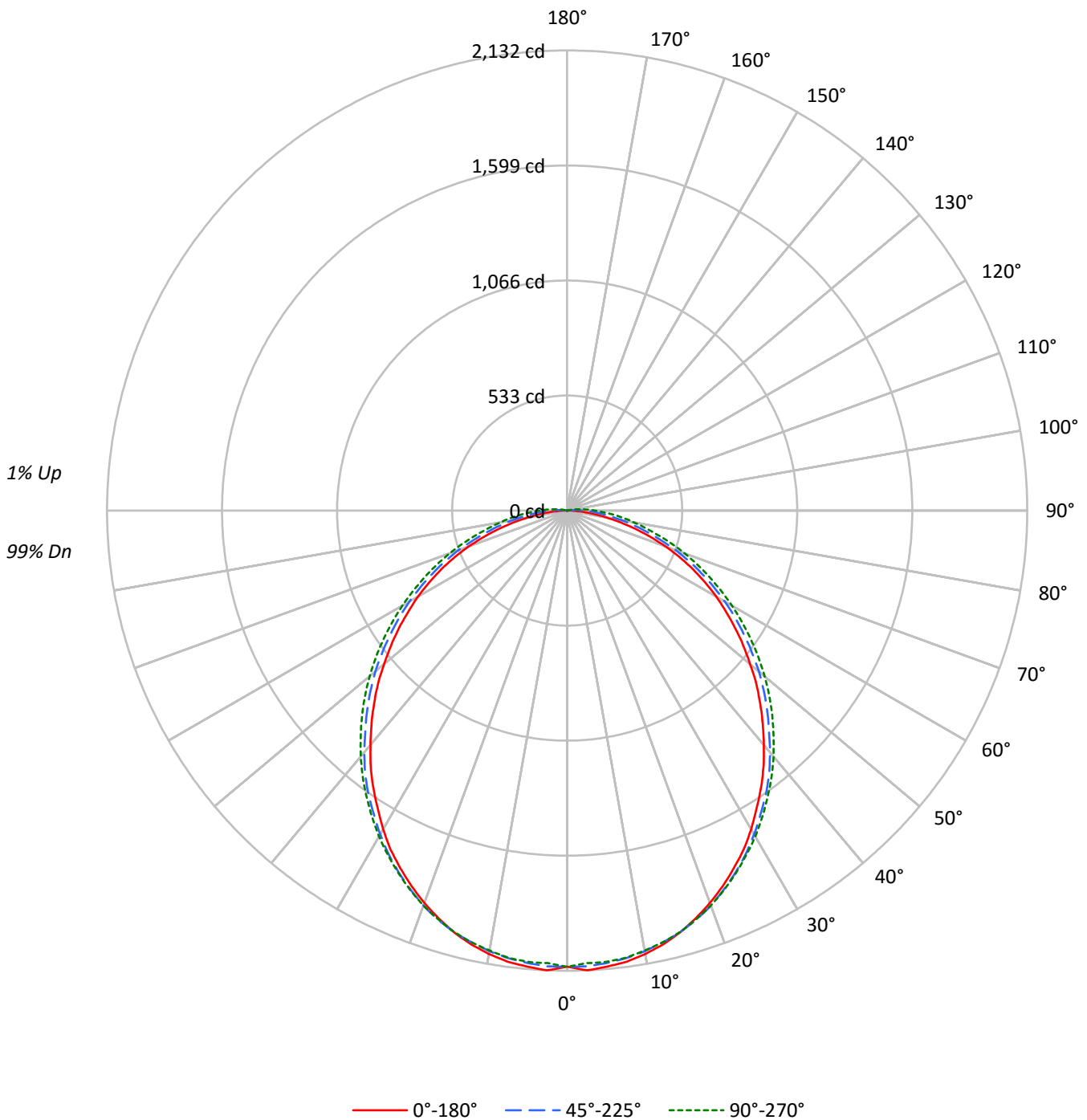
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P231402

CATALOG NUMBER: HGL-S-FR-60L840-UNV-4

Luminous Intensity Polar Plot





TEST NUMBER: P231402

CATALOG NUMBER: HGL-S-FR-60L840-UNV-4

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	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°	24816	24816	24816
5°	24993	24732	24644
10°	24859	24575	24484
15°	24579	24359	24288
20°	24155	24053	23958
25°	23657	23588	23517
30°	23081	23054	23058
35°	22418	22498	22534
40°	21683	21809	21996
45°	20950	21078	21384
50°	20152	20394	20748
55°	19416	19553	20009
60°	18684	18783	19254
65°	17757	17832	18476
70°	16510	16822	17723
75°	14730	15486	16878
80°	12395	14603	16967
85°	9889	14995	19030



TEST NUMBER: P231402

CATALOG NUMBER: HGL-S-FR-60L840-UNV-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.7	3.4
10°-20°	568.3	9.8
20°-30°	846.3	14.6
30°-40°	996.0	17.2
40°-50°	1006.0	17.3
50°-60°	891.5	15.4
60°-70°	678.3	11.7
70°-80°	407.2	7.0
80°-90°	167.4	2.9
90°-100°	36.4	0.6
100°-110°	1.8	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°	1614.3	27.8
0°-40°	2610.3	45.0
0°-60°	4507.8	77.7
0°-90°	5760.8	99.3
90°-120°	38.2	0.7
90°-150°	38.2	0.7
90°-180°	38.0	0.7
0°-180°	5798.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2113	2113	2113	2113	2113	
5°	2121	2097	2104	2100	2099	201
15°	2023	2003	2021	2020	2021	570
25°	1828	1813	1848	1846	1852	842
35°	1567	1561	1605	1613	1620	979
45°	1265	1270	1311	1329	1344	976
55°	952	965	1000	1025	1038	851
65°	642	652	687	714	727	635
75°	328	342	383	422	433	348
85°	76	99	153	197	212	85
90°	2	31	76	114	129	5
95°	0	2	28	55	66	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



TEST NUMBER: P231402

CATALOG NUMBER: HGL-S-FR-60L840-UNV-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2113.4	2113.4	2113.4	2113.4	2113.4
2.5°	2131.8	2107.9	2113.4	2109.7	2098.7
5°	2120.8	2096.8	2104.2	2100.5	2098.7
7.5°	2107.9	2083.9	2091.3	2087.6	2089.5
10°	2085.8	2061.8	2072.9	2069.2	2069.2
12.5°	2058.2	2037.9	2049.0	2045.3	2049.0
15°	2023.2	2002.9	2021.3	2019.5	2021.3
17.5°	1980.8	1962.4	1988.2	1984.5	1986.4
20°	1934.8	1916.4	1947.7	1940.3	1947.7
22.5°	1883.3	1868.5	1899.8	1894.3	1901.7
25°	1828.0	1813.3	1848.3	1846.5	1852.0
27.5°	1771.0	1758.1	1793.1	1796.8	1798.6
30°	1704.7	1695.5	1732.3	1737.8	1743.4
32.5°	1634.7	1629.2	1667.9	1677.1	1682.6
35°	1566.6	1561.1	1605.3	1612.7	1620.0
37.5°	1494.8	1491.2	1537.2	1544.5	1555.6
40°	1417.5	1419.4	1461.7	1474.6	1487.5
42.5°	1342.0	1345.7	1384.4	1402.8	1415.7
45°	1264.7	1270.2	1310.7	1329.2	1343.9
47.5°	1189.2	1194.8	1235.3	1255.5	1270.2
50°	1106.4	1119.3	1159.8	1178.2	1194.8
52.5°	1029.1	1042.0	1078.8	1102.7	1117.4
55°	951.8	964.6	999.6	1025.4	1038.3
57.5°	872.6	891.0	922.3	948.1	961.0
60°	799.0	810.0	845.0	870.8	881.8
62.5°	719.8	730.9	764.0	795.3	802.6
65°	642.5	651.7	686.7	714.3	727.2
67.5°	563.3	574.4	609.3	638.8	651.7
70°	484.2	495.2	533.9	567.0	578.1
72.5°	403.2	416.1	454.7	493.4	506.3
75°	327.7	342.4	382.9	421.6	432.6
77.5°	254.0	272.5	316.6	357.1	371.9
80°	185.9	208.0	255.9	300.1	313.0
82.5°	127.0	151.0	200.7	246.7	263.3
85°	75.5	99.4	152.8	197.0	211.7
87.5°	33.1	58.9	110.5	152.8	165.7
90°	1.8	31.3	75.5	114.1	128.9
92.5°	0.0	12.9	47.9	81.0	95.7
95°	0.0	1.8	27.6	55.2	66.3
97.5°	0.0	0.0	12.9	33.1	42.3
100°	0.0	0.0	1.8	16.6	23.9
102.5°	1.8	0.0	0.0	3.7	9.2
105°	1.8	0.0	0.0	0.0	1.8
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P231402

CATALOG NUMBER: HGL-S-FR-60L840-UNV-4

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)