

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: P257020

Luminaire Tested: **HGL-S-FR-50L940-UNV-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257020  
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-50L940-UNV-4  
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS  
Light Source: (168) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3813.9 lumens  
Efficiency: N/A  
Efficacy: 99.1 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

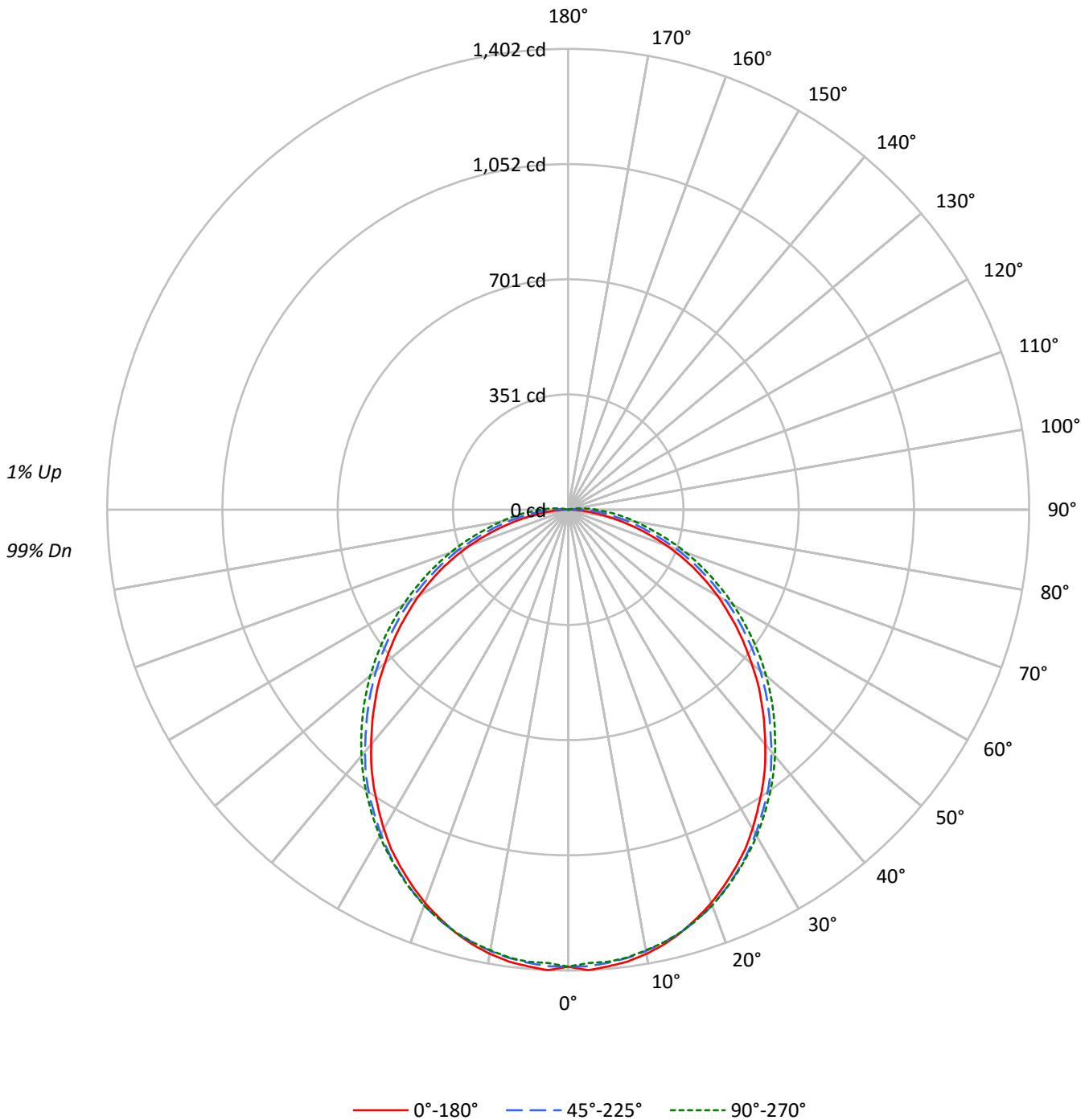
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	16322	16322	16322
5°	16437	16266	16208
10°	16350	16162	16103
15°	16165	16021	15974
20°	15887	15820	15757
25°	15559	15514	15466
30°	15180	15162	15165
35°	14745	14797	14821
40°	14261	14343	14466
45°	13779	13864	14065
50°	13254	13413	13645
55°	12770	12859	13160
60°	12288	12353	12664
65°	11679	11727	12152
70°	10857	11063	11656
75°	9687	10184	11100
80°	8155	9604	11156
85°	6497	9863	12513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.4	3.4
10°-20°	373.7	9.8
20°-30°	556.6	14.6
30°-40°	655.1	17.2
40°-50°	661.6	17.3
50°-60°	586.3	15.4
60°-70°	446.1	11.7
70°-80°	267.8	7.0
80°-90°	110.1	2.9
90°-100°	24.0	0.6
100°-110°	1.2	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°	1061.7	27.8
0°-40°	1716.8	45.0
0°-60°	2964.8	77.7
0°-90°	3788.8	99.3
90°-120°	25.1	0.7
90°-150°	25.1	0.7
90°-180°	25.0	0.7
0°-180°	3813.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1395	1379	1384	1382	1380	132
15°	1331	1317	1329	1328	1329	375
25°	1202	1193	1216	1214	1218	554
35°	1030	1027	1056	1061	1066	644
45°	832	835	862	874	884	642
55°	626	634	657	674	683	560
65°	423	429	452	470	478	418
75°	216	225	252	277	284	229
85°	50	65	100	130	139	56
90°	1	21	50	75	85	3
95°	0	1	18	36	44	0
105°	1	0	0	0	1	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°	1390.0	1390.0	1390.0	1390.0	1390.0
2.5°	1402.1	1386.3	1390.0	1387.5	1380.3
5°	1394.8	1379.1	1383.9	1381.5	1380.3
7.5°	1386.3	1370.6	1375.4	1373.0	1374.2
10°	1371.8	1356.1	1363.3	1360.9	1360.9
12.5°	1353.6	1340.3	1347.6	1345.2	1347.6
15°	1330.6	1317.3	1329.4	1328.2	1329.4
17.5°	1302.8	1290.7	1307.6	1305.2	1306.4
20°	1272.5	1260.4	1281.0	1276.1	1281.0
22.5°	1238.6	1228.9	1249.5	1245.9	1250.7
25°	1202.3	1192.6	1215.6	1214.4	1218.0
27.5°	1164.8	1156.3	1179.3	1181.7	1182.9
30°	1121.2	1115.1	1139.3	1143.0	1146.6
32.5°	1075.2	1071.5	1097.0	1103.0	1106.6
35°	1030.4	1026.7	1055.8	1060.6	1065.5
37.5°	983.1	980.7	1011.0	1015.8	1023.1
40°	932.3	933.5	961.3	969.8	978.3
42.5°	882.6	885.1	910.5	922.6	931.1
45°	831.8	835.4	862.1	874.2	883.9
47.5°	782.2	785.8	812.4	825.7	835.4
50°	727.7	736.1	762.8	774.9	785.8
52.5°	676.8	685.3	709.5	725.2	734.9
55°	626.0	634.4	657.4	674.4	682.9
57.5°	573.9	586.0	606.6	623.5	632.0
60°	525.5	532.7	555.7	572.7	580.0
62.5°	473.4	480.7	502.5	523.0	527.9
65°	422.6	428.6	451.6	469.8	478.3
67.5°	370.5	377.8	400.8	420.1	428.6
70°	318.4	325.7	351.1	372.9	380.2
72.5°	265.2	273.6	299.1	324.5	333.0
75°	215.5	225.2	251.8	277.3	284.5
77.5°	167.1	179.2	208.3	234.9	244.6
80°	122.3	136.8	168.3	197.4	205.8
82.5°	83.5	99.3	132.0	162.2	173.1
85°	49.6	65.4	100.5	129.6	139.2
87.5°	21.8	38.7	72.6	100.5	109.0
90°	1.2	20.6	49.6	75.1	84.8
92.5°	0.0	8.5	31.5	53.3	63.0
95°	0.0	1.2	18.2	36.3	43.6
97.5°	0.0	0.0	8.5	21.8	27.8
100°	0.0	0.0	1.2	10.9	15.7
102.5°	1.2	0.0	0.0	2.4	6.1
105°	1.2	0.0	0.0	0.0	1.2
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)