

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: P231387

Luminaire Tested: **HGL-S-FR-30L830-UNV-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231387  
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-30L830-UNV-4  
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3036.3 lumens  
Efficiency: N/A  
Efficacy: 130.9 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

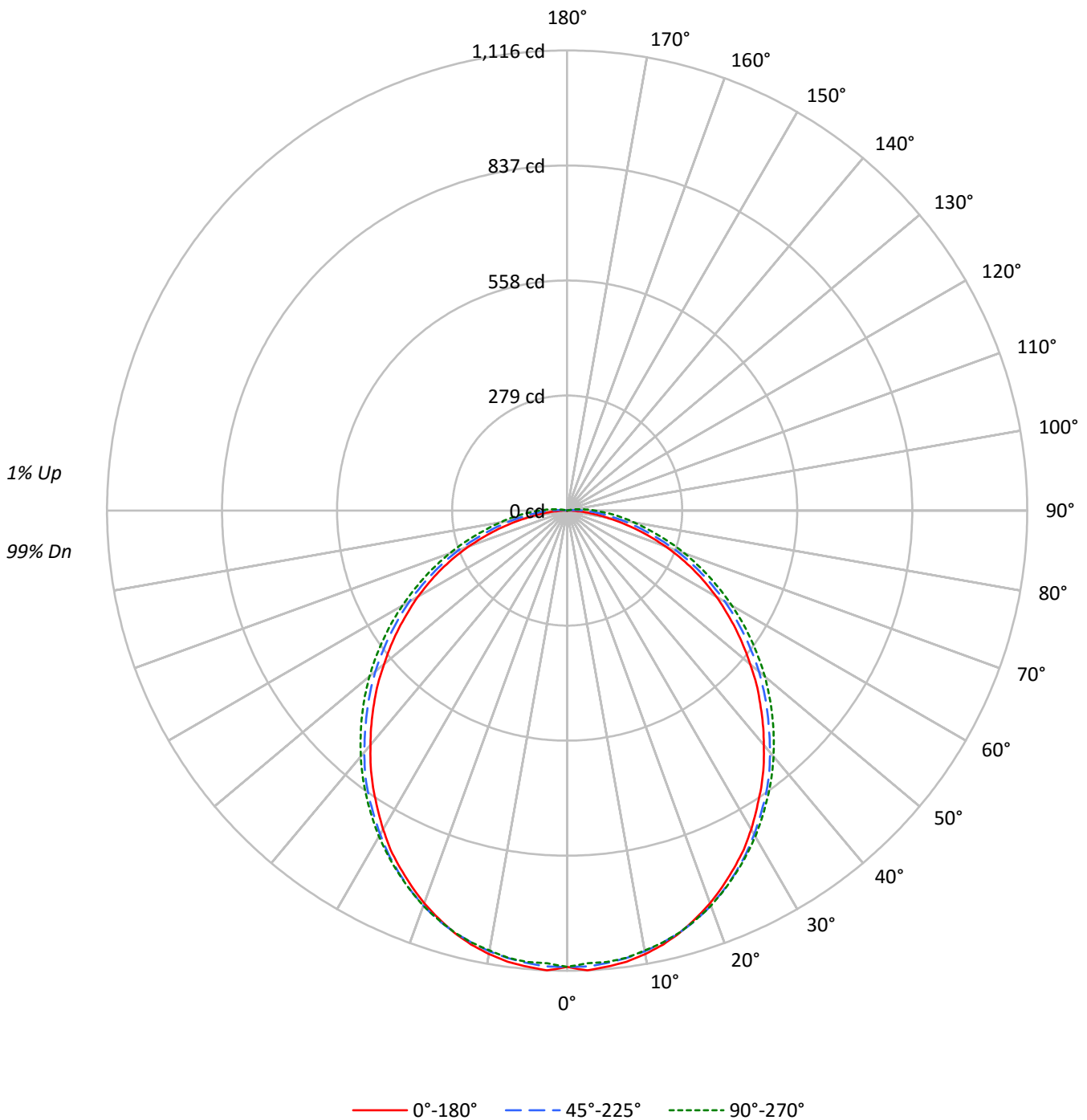
Input Watts (W): 23.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P231387

CATALOG NUMBER: HGL-S-FR-30L830-UNV-4

### Luminous Intensity Polar Plot





TEST NUMBER: P231387

CATALOG NUMBER: HGL-S-FR-30L830-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	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°	12994	12994	12994
5°	13086	12950	12904
10°	13016	12868	12819
15°	12869	12755	12718
20°	12648	12594	12544
25°	12387	12351	12313
30°	12085	12071	12073
35°	11738	11779	11798
40°	11353	11418	11516
45°	10969	11037	11197
50°	10551	10679	10864
55°	10165	10238	10476
60°	9781	9834	10081
65°	9297	9336	9673
70°	8644	8807	9280
75°	7713	8109	8837
80°	6494	7647	8885
85°	5174	7851	9969



TEST NUMBER: P231387

CATALOG NUMBER: HGL-S-FR-30L830-UNV-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.6	3.4
10°-20°	297.5	9.8
20°-30°	443.1	14.6
30°-40°	521.5	17.2
40°-50°	526.8	17.3
50°-60°	466.8	15.4
60°-70°	355.2	11.7
70°-80°	213.2	7.0
80°-90°	87.6	2.9
90°-100°	19.1	0.6
100°-110°	0.9	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°	845.3	27.8
0°-40°	1366.8	45.0
0°-60°	2360.3	77.7
0°-90°	3016.3	99.3
90°-120°	20.0	0.7
90°-150°	20.0	0.7
90°-180°	20.0	0.7
0°-180°	3036.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1107	1107	1107	1107	1107	
5°	1110	1098	1102	1100	1099	105
15°	1059	1049	1058	1057	1058	298
25°	957	950	968	967	970	441
35°	820	817	840	844	848	513
45°	662	665	686	696	704	511
55°	498	505	523	537	544	446
65°	336	341	360	374	381	333
75°	172	179	200	221	226	182
85°	40	52	80	103	111	44
90°	1	16	40	60	68	3
95°	0	1	14	29	35	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



TEST NUMBER: P231387

CATALOG NUMBER: HGL-S-FR-30L830-UNV-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1106.6	1106.6	1106.6	1106.6	1106.6
2.5°	1116.2	1103.7	1106.6	1104.6	1098.9
5°	1110.4	1097.9	1101.8	1099.8	1098.9
7.5°	1103.7	1091.2	1095.0	1093.1	1094.0
10°	1092.1	1079.6	1085.4	1083.4	1083.4
12.5°	1077.7	1067.1	1072.8	1070.9	1072.8
15°	1059.3	1048.7	1058.4	1057.4	1058.4
17.5°	1037.2	1027.5	1041.0	1039.1	1040.1
20°	1013.1	1003.4	1019.8	1016.0	1019.8
22.5°	986.1	978.4	994.8	991.9	995.7
25°	957.2	949.5	967.8	966.8	969.7
27.5°	927.3	920.5	938.9	940.8	941.7
30°	892.6	887.8	907.0	909.9	912.8
32.5°	856.0	853.1	873.3	878.1	881.0
35°	820.3	817.4	840.5	844.4	848.2
37.5°	782.7	780.8	804.9	808.7	814.5
40°	742.2	743.2	765.3	772.1	778.8
42.5°	702.7	704.6	724.9	734.5	741.3
45°	662.2	665.1	686.3	695.9	703.7
47.5°	622.7	625.6	646.8	657.4	665.1
50°	579.3	586.1	607.3	616.9	625.6
52.5°	538.8	545.6	564.9	577.4	585.1
55°	498.3	505.1	523.4	536.9	543.6
57.5°	456.9	466.5	482.9	496.4	503.2
60°	418.3	424.1	442.4	455.9	461.7
62.5°	376.9	382.7	400.0	416.4	420.3
65°	336.4	341.2	359.5	374.0	380.7
67.5°	295.0	300.7	319.1	334.5	341.2
70°	253.5	259.3	279.5	296.9	302.7
72.5°	211.1	217.8	238.1	258.3	265.1
75°	171.6	179.3	200.5	220.7	226.5
77.5°	133.0	142.7	165.8	187.0	194.7
80°	97.4	108.9	134.0	157.1	163.9
82.5°	66.5	79.0	105.1	129.2	137.8
85°	39.5	52.1	80.0	103.1	110.9
87.5°	17.4	30.8	57.8	80.0	86.8
90°	1.0	16.4	39.5	59.8	67.5
92.5°	0.0	6.7	25.1	42.4	50.1
95°	0.0	1.0	14.5	28.9	34.7
97.5°	0.0	0.0	6.7	17.4	22.2
100°	0.0	0.0	1.0	8.7	12.5
102.5°	1.0	0.0	0.0	1.9	4.8
105°	1.0	0.0	0.0	0.0	1.0
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: P231387

CATALOG NUMBER: HGL-S-FR-30L830-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)