

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: P231390

Luminaire Tested: **HGL-S-FR-53L830-UNV-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231390
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-53L830-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: 5109.2 lumens
Efficiency: N/A
Efficacy: 123.1 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

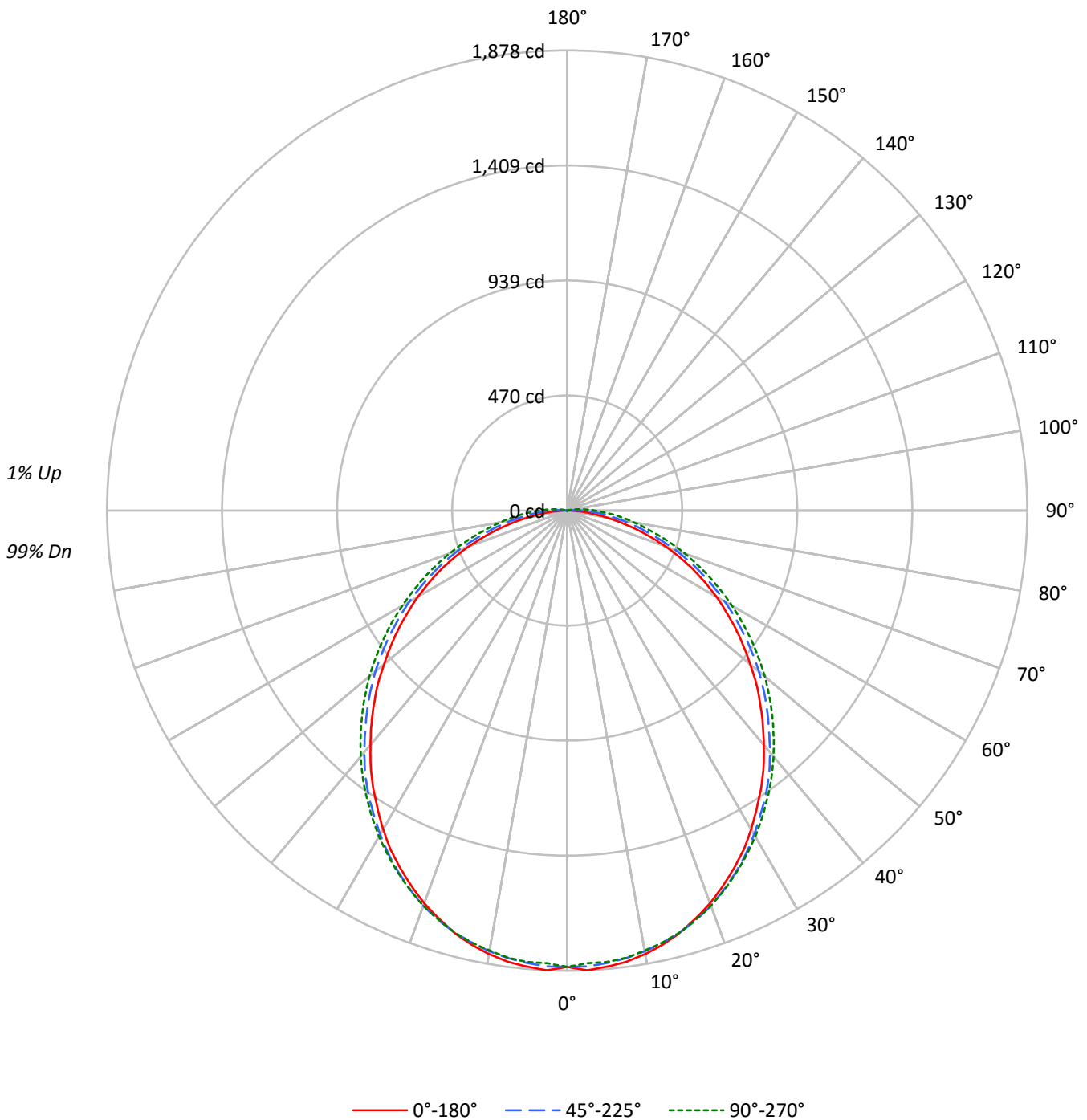
Input Watts (W): 41.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	21864	21864	21864
5°	22020	21790	21713
10°	21902	21651	21572
15°	21656	21462	21400
20°	21283	21193	21109
25°	20843	20783	20719
30°	20335	20313	20315
35°	19752	19822	19854
40°	19104	19214	19380
45°	18458	18571	18840
50°	17755	17968	18280
55°	17107	17227	17629
60°	16460	16549	16963
65°	15645	15711	16279
70°	14546	14822	15614
75°	12977	13646	14873
80°	10922	12868	14945
85°	8711	13209	16765



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.0	3.4
10°-20°	500.7	9.8
20°-30°	745.6	14.6
30°-40°	877.5	17.2
40°-50°	886.4	17.3
50°-60°	785.5	15.4
60°-70°	597.7	11.7
70°-80°	358.8	7.0
80°-90°	147.4	2.9
90°-100°	32.1	0.6
100°-110°	1.5	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°	1422.3	27.8
0°-40°	2299.8	45.0
0°-60°	3971.7	77.7
0°-90°	5075.6	99.3
90°-120°	33.6	0.7
90°-150°	33.6	0.7
90°-180°	34.0	0.7
0°-180°	5109.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1862	1862	1862	1862	1862	
5°	1868	1847	1854	1851	1849	177
15°	1783	1765	1781	1779	1781	502
25°	1611	1598	1628	1627	1632	742
35°	1380	1375	1414	1421	1427	863
45°	1114	1119	1155	1171	1184	860
55°	839	850	881	903	915	750
65°	566	574	605	629	641	560
75°	289	302	337	371	381	307
85°	66	88	135	174	186	75
90°	2	28	66	101	114	4
95°	0	2	24	49	58	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°	1862.0	1862.0	1862.0	1862.0	1862.0
2.5°	1878.2	1857.2	1862.0	1858.8	1849.1
5°	1868.5	1847.4	1853.9	1850.7	1849.1
7.5°	1857.2	1836.1	1842.6	1839.3	1840.9
10°	1837.7	1816.6	1826.3	1823.1	1823.1
12.5°	1813.4	1795.5	1805.3	1802.0	1805.3
15°	1782.6	1764.7	1780.9	1779.3	1780.9
17.5°	1745.2	1729.0	1751.7	1748.5	1750.1
20°	1704.7	1688.5	1716.1	1709.6	1716.1
22.5°	1659.3	1646.3	1673.9	1669.0	1675.5
25°	1610.6	1597.6	1628.5	1626.8	1631.7
27.5°	1560.3	1549.0	1579.8	1583.0	1584.7
30°	1501.9	1493.8	1526.3	1531.1	1536.0
32.5°	1440.3	1435.4	1469.5	1477.6	1482.5
35°	1380.3	1375.4	1414.4	1420.9	1427.3
37.5°	1317.0	1313.8	1354.3	1360.8	1370.6
40°	1248.9	1250.5	1287.8	1299.2	1310.6
42.5°	1182.4	1185.7	1219.7	1235.9	1247.3
45°	1114.3	1119.2	1154.8	1171.1	1184.0
47.5°	1047.8	1052.7	1088.3	1106.2	1119.2
50°	974.8	986.2	1021.8	1038.1	1052.7
52.5°	906.7	918.0	950.5	971.6	984.5
55°	838.6	849.9	880.7	903.4	914.8
57.5°	768.8	785.0	812.6	835.3	846.7
60°	703.9	713.7	744.5	767.2	776.9
62.5°	634.2	643.9	673.1	700.7	707.2
65°	566.1	574.2	605.0	629.3	640.7
67.5°	496.3	506.1	536.9	562.8	574.2
70°	426.6	436.3	470.4	499.6	509.3
72.5°	355.2	366.6	400.6	434.7	446.0
75°	288.7	301.7	337.4	371.4	381.2
77.5°	223.8	240.1	279.0	314.7	327.6
80°	163.8	183.3	225.5	264.4	275.7
82.5°	111.9	133.0	176.8	217.3	231.9
85°	66.5	87.6	134.6	173.6	186.5
87.5°	29.2	51.9	97.3	134.6	146.0
90°	1.6	27.6	66.5	100.6	113.5
92.5°	0.0	11.4	42.2	71.4	84.3
95°	0.0	1.6	24.3	48.7	58.4
97.5°	0.0	0.0	11.4	29.2	37.3
100°	0.0	0.0	1.6	14.6	21.1
102.5°	1.6	0.0	0.0	3.2	8.1
105°	1.6	0.0	0.0	0.0	1.6
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)