

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: METALUX

Report Number: P294472

Luminaire Tested: **BMK-30-WFL-UNV-L750-CD-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P294472
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-103-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BMK-30-WFL-UNV-L750-CD-U
Description: BENCHMARK HIGHBAY LED FIXTURE
WITH WIDE FROSTED LENS
Light Source: (528) 70 CRI 5000K LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32507.0 lumens
Efficiency: N/A
Efficacy: 161.6 lumens/watt
Spacing Criteria (0/90/45): 1.7 / 1.7 / 1.72
Luminous Opening: Vertical Cylinder (Dia: 1.33' x H: 0.12')
CIE Type: Direct

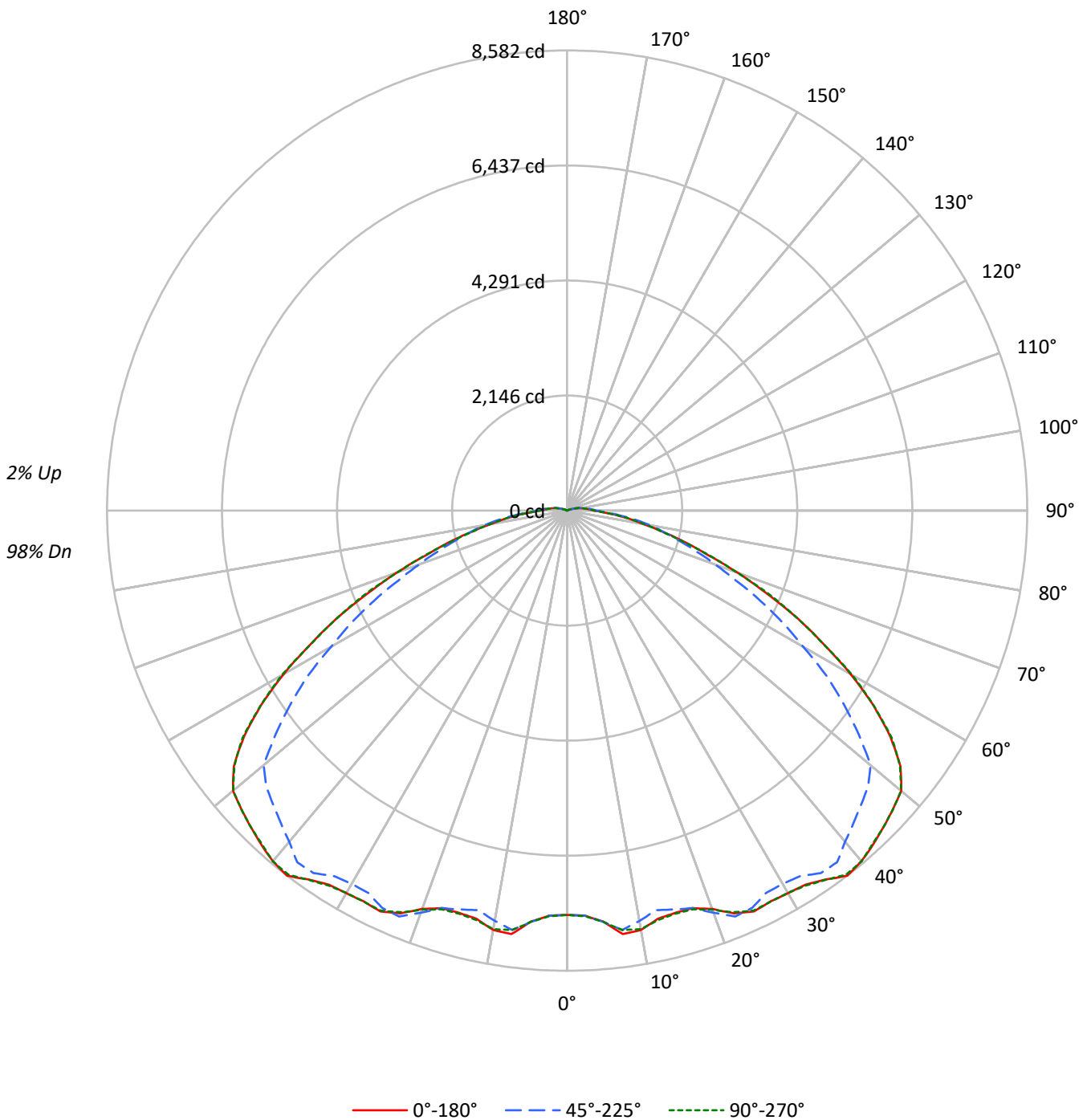
Input Watts (W): 201.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	0
RCR																					
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	100	100	100	98
1	107	102	97	93	104	100	95	92	95	91	88	91	88	85	87	84	82	87	84	82	80
2	97	88	81	75	94	86	79	74	82	76	72	78	74	70	75	71	68	75	71	68	65
3	88	77	68	61	85	75	67	60	71	65	59	68	62	58	65	61	56	65	61	56	54
4	80	67	58	51	77	66	57	50	63	55	49	60	54	48	58	52	47	58	52	47	45
5	73	59	50	43	71	58	49	43	56	48	42	53	47	41	51	45	41	51	45	41	38
6	67	53	44	37	65	52	43	37	50	42	36	48	41	36	46	40	35	46	40	35	33
7	62	48	38	32	60	47	38	32	45	37	31	43	36	31	42	35	31	42	35	31	29
8	57	43	34	28	56	42	34	28	41	33	28	39	32	27	38	32	27	38	32	27	25
9	53	39	31	25	52	39	30	25	37	30	25	36	29	24	35	29	24	35	29	24	22
10	50	36	28	22	48	35	28	22	34	27	22	33	27	22	32	26	22	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	58130	58130	58130
5°	58916	58956	58949
10°	60895	59575	60750
15°	60068	59556	60187
20°	62159	62744	62279
25°	66447	65841	66317
30°	68616	66929	68541
35°	72961	71661	73031
40°	78113	73761	78098
45°	81279	75536	81288
50°	85399	77553	85352
55°	84528	72284	84857
60°	78104	65018	78538
65°	68663	57731	68597
70°	57339	49841	56959
75°	46918	44517	45939
80°	38169	41158	38643
85°	33355	36269	33856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	743.4	2.3
10°-20°	2200.5	6.8
20°-30°	3743.1	11.5
30°-40°	5213.0	16.0
40°-50°	6237.8	19.2
50°-60°	6065.8	18.7
60°-70°	4303.3	13.2
70°-80°	2343.4	7.2
80°-90°	1027.1	3.2
90°-100°	426.8	1.3
100°-110°	175.2	0.5
110°-120°	27.0	0.1
120°-130°	0.7	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°	6687.1	20.6
0°-40°	11900.0	36.6
0°-60°	24203.6	74.5
0°-90°	31877.4	98.1
90°-120°	628.9	1.9
90°-150°	629.6	1.9
90°-180°	630.0	1.9
0°-180°	32507.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7540	7540	7540	7540	7540	
5°	7693	7680	7698	7683	7697	747
15°	7767	7669	7701	7654	7782	2215
25°	8246	8033	8171	8041	8230	3784
35°	8401	8407	8251	8380	8409	5289
45°	8345	8074	7756	8083	8346	6457
55°	7361	6809	6295	6823	7390	6510
65°	4728	4317	3975	4322	4723	4667
75°	2277	2133	2160	2140	2229	2440
85°	892	890	970	897	905	843
90°	497	536	548	535	504	285
95°	364	383	410	387	368	276
105°	159	160	158	161	160	172
115°	14	20	23	19	15	24
125°	0	0	0	0	0	1
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°	7540.4	7540.4	7540.4	7540.4	7540.4
2.5°	7559.2	7554.8	7560.1	7561.9	7570.0
5°	7692.8	7680.2	7698.1	7682.9	7697.2
7.5°	7966.1	7903.3	7888.1	7883.6	7890.8
10°	7942.8	7898.0	7770.7	7896.2	7923.9
12.5°	7798.5	7751.9	7632.7	7747.4	7824.5
15°	7767.1	7668.6	7700.8	7654.2	7782.4
17.5°	7771.6	7683.8	7773.4	7676.6	7795.8
20°	7906.0	7849.6	7980.4	7843.3	7921.3
22.5°	8130.0	8031.5	8192.8	8001.0	8108.5
25°	8246.5	8033.3	8171.3	8041.3	8230.4
27.5°	8216.1	8074.5	8036.0	8073.6	8220.5
30°	8239.4	8159.6	8036.9	8146.2	8230.4
32.5°	8269.8	8222.3	8083.4	8217.0	8287.8
35°	8400.7	8406.9	8251.0	8380.0	8408.7
37.5°	8581.7	8383.6	8268.0	8370.2	8553.0
40°	8539.5	8273.4	8063.7	8272.5	8537.8
42.5°	8446.4	8200.8	7902.4	8204.4	8431.1
45°	8345.1	8073.6	7755.5	8083.4	8346.0
47.5°	8242.1	8025.2	7611.2	8015.3	8242.1
50°	8133.6	7746.5	7386.3	7748.3	8129.1
52.5°	7838.8	7339.7	6850.5	7339.7	7824.5
55°	7361.2	6809.2	6294.9	6822.7	7389.9
57.5°	6778.8	6292.2	5733.1	6285.9	6785.9
60°	6113.0	5612.1	5088.8	5647.9	6147.0
62.5°	5389.9	5033.2	4537.7	5001.9	5385.4
65°	4727.7	4317.3	3975.0	4321.7	4723.2
67.5°	4012.6	3688.2	3406.9	3682.8	4077.1
70°	3378.2	3107.6	2936.4	3107.6	3355.8
72.5°	2750.0	2612.9	2526.9	2607.6	2780.5
75°	2276.9	2132.6	2160.4	2139.8	2229.4
77.5°	1818.1	1746.4	1849.5	1747.3	1806.5
80°	1441.8	1426.5	1554.7	1422.1	1459.7
82.5°	1155.9	1138.9	1259.9	1133.5	1168.5
85°	891.6	889.8	969.5	897.0	905.0
87.5°	658.6	681.9	718.6	685.5	659.5
90°	497.3	535.8	547.5	535.0	503.6
92.5°	425.6	451.6	468.6	450.7	432.8
95°	363.8	382.6	409.5	387.1	368.3
97.5°	308.2	326.2	345.0	326.2	310.9
100°	256.3	268.8	286.7	270.6	259.0
102.5°	211.5	214.2	223.1	217.7	210.6
105°	158.6	160.4	157.7	161.3	159.5
107.5°	114.7	112.9	105.7	115.6	113.8
110°	71.7	71.7	69.9	72.6	71.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	37.6	40.3	43.9	40.3	39.4
115°	14.3	19.7	23.3	18.8	15.2
117.5°	6.3	9.0	9.9	9.0	6.3
120°	5.4	6.3	5.4	5.4	5.4
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)