

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: P294508

Luminaire Tested: **BMK-30-WCL-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: P294508
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1903-198-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BMK-30-WCL-UNV-L750-CD-U
Description: BENCHMARK HIGHBAY LED FIXTURE
WITH WIDE CLEAR 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: 33458.0 lumens
Efficiency: N/A
Efficacy: 166.4 lumens/watt
Spacing Criteria (0/90/45): 1.8 / 1.79 / 1.79
Luminous Opening: Vertical Cylinder (Dia: 1.33' x H: 0.12')
CIE Type: Direct

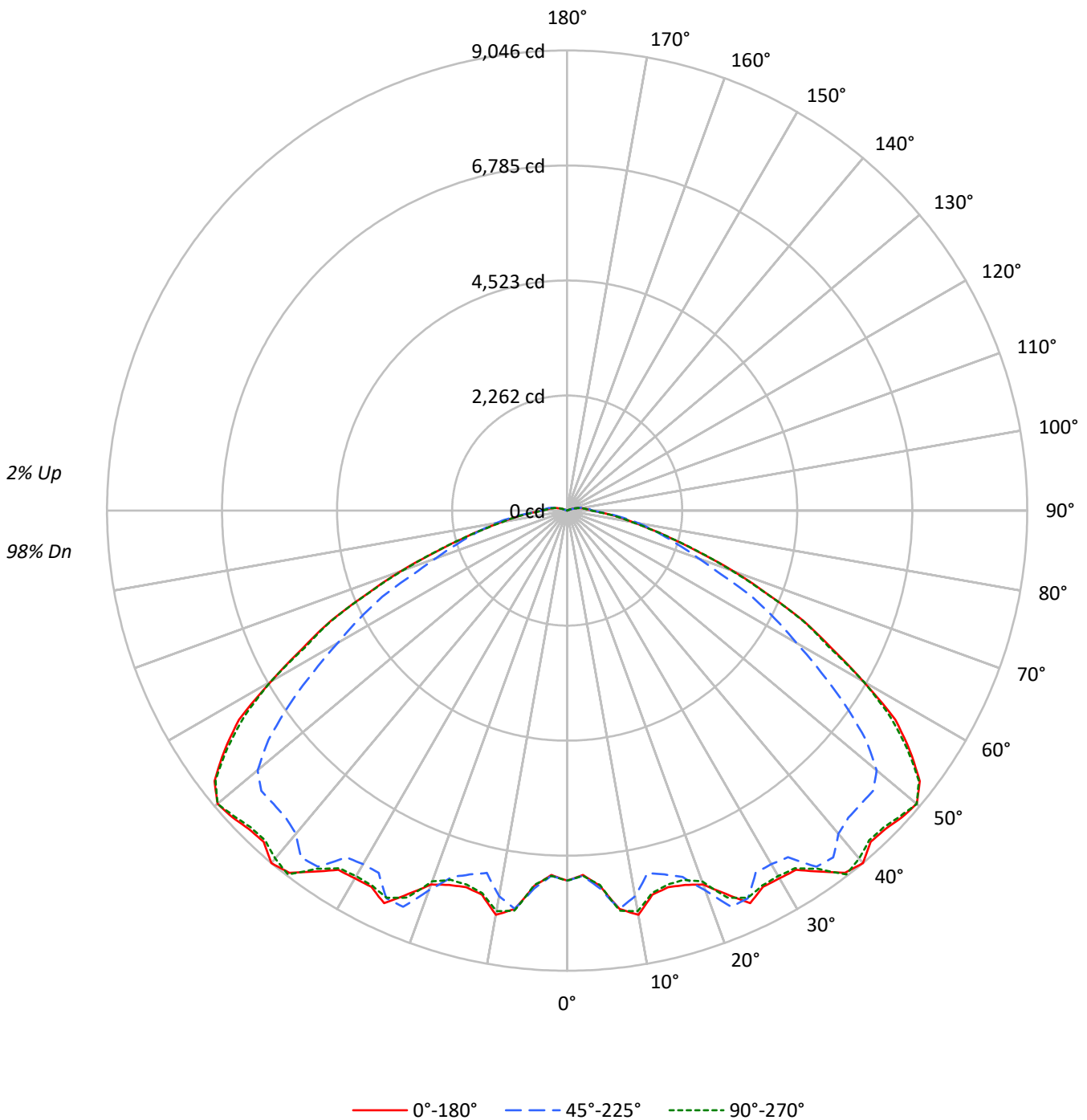
Input Watts (W): 201.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
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	110	110	110		105	105	105		100	100	100	98
1	108	102	98	94	105	100	96	92	95	92	89		91	88	86		87	85	83	80
2	97	88	81	75	94	86	80	74	82	77	72		79	74	70		75	71	68	66
3	88	77	68	61	85	75	67	60	72	65	59		68	63	58		66	61	56	54
4	80	67	58	51	77	66	57	50	63	55	49		60	54	48		58	52	47	45
5	73	59	50	43	71	58	49	42	56	48	42		53	46	41		51	45	40	38
6	67	53	43	37	65	52	43	36	50	42	36		48	41	35		46	40	35	33
7	62	47	38	32	60	46	38	32	45	37	31		43	36	31		41	35	30	28
8	57	43	34	28	55	42	34	28	41	33	27		39	32	27		38	31	27	25
9	53	39	30	25	51	38	30	24	37	29	24		36	29	24		35	28	24	22
10	50	36	27	22	48	35	27	22	34	27	22		33	26	21		32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	56084	56084	56084
5°	56702	57112	56558
10°	61856	59001	61302
15°	59268	57279	58874
20°	61496	62466	60969
25°	68616	67752	67687
30°	69511	66811	69087
35°	75217	74240	74635
40°	82749	75886	81671
45°	86203	79469	85733
50°	94167	83391	94194
55°	94431	76739	93692
60°	85933	66555	86001
65°	74410	58220	74215
70°	58853	46665	58261
75°	43841	41136	44118
80°	34760	37669	33979
85°	30475	32177	29674



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	730.7	2.2
10°-20°	2149.4	6.4
20°-30°	3758.4	11.2
30°-40°	5352.0	16.0
40°-50°	6624.3	19.8
50°-60°	6589.5	19.7
60°-70°	4466.3	13.3
70°-80°	2214.8	6.6
80°-90°	923.8	2.8
90°-100°	434.7	1.3
100°-110°	189.0	0.6
110°-120°	24.5	0.1
120°-130°	0.6	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°	6638.5	19.8
0°-40°	11990.5	35.8
0°-60°	25204.2	75.3
0°-90°	32809.2	98.1
90°-120°	648.2	1.9
90°-150°	648.8	1.9
90°-180°	649.0	1.9
0°-180°	33458.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7275	7275	7275	7275	7275	
5°	7404	7374	7457	7406	7385	735
15°	7664	7388	7406	7401	7613	2198
25°	8516	8007	8408	7974	8400	3836
35°	8660	8687	8548	8709	8593	5461
45°	8851	8580	8159	8548	8802	6896
55°	8224	7465	6683	7409	8159	7261
65°	5123	4454	4009	4472	5110	5017
75°	2128	1991	1996	2012	2141	2346
85°	815	793	860	790	793	768
90°	488	520	496	514	480	276
95°	372	399	415	394	370	286
105°	180	172	166	174	180	190
115°	13	16	19	16	13	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



TEST NUMBER: P294508

CATALOG NUMBER: BMK-30-WCL-UNV-L750-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7275.1	7275.1	7275.1	7275.1	7275.1
2.5°	7167.9	7197.4	7186.6	7175.9	7186.6
5°	7403.7	7374.2	7457.3	7406.4	7384.9
7.5°	7899.4	7827.1	7894.1	7829.7	7931.6
10°	8068.2	7947.6	7695.8	7918.2	7995.9
12.5°	7733.3	7615.4	7296.5	7636.8	7701.1
15°	7663.6	7387.6	7406.4	7401.0	7612.7
17.5°	7714.5	7384.9	7551.1	7390.3	7612.7
20°	7821.7	7674.3	7945.0	7679.7	7754.7
22.5°	8159.3	8030.7	8430.0	8025.4	8234.4
25°	8515.7	8006.6	8408.5	7974.4	8400.5
27.5°	8338.9	8054.8	8028.0	8022.7	8309.4
30°	8346.9	8143.3	8022.7	8164.7	8296.0
32.5°	8373.7	8306.7	8081.6	8336.2	8336.2
35°	8660.4	8687.2	8547.9	8708.6	8593.4
37.5°	8973.9	8684.5	8593.4	8692.6	9016.8
40°	9046.3	8537.2	8296.0	8526.4	8928.4
42.5°	8831.9	8604.1	8186.1	8577.3	8789.0
45°	8850.7	8580.0	8159.3	8547.9	8802.4
47.5°	8925.7	8743.5	8156.7	8716.7	8885.5
50°	8968.6	8419.3	7942.3	8416.6	8971.2
52.5°	8738.1	8017.3	7398.3	8006.6	8711.3
55°	8223.6	7465.3	6682.9	7409.0	8159.3
57.5°	7650.2	6830.3	5921.9	6784.7	7527.0
60°	6725.8	6034.4	5209.1	6023.7	6731.1
62.5°	5857.6	5377.9	4606.2	5361.8	5795.9
65°	5123.4	4453.5	4008.7	4472.2	5110.0
67.5°	4223.0	3703.2	3266.4	3705.9	4198.9
70°	3467.4	3103.0	2749.3	3078.8	3432.5
72.5°	2719.8	2513.4	2342.0	2505.4	2727.8
75°	2127.6	1990.9	1996.3	2012.4	2141.0
77.5°	1664.0	1594.4	1701.5	1602.4	1650.6
80°	1313.0	1275.5	1422.9	1275.5	1283.5
82.5°	1045.0	1010.2	1128.1	1012.9	1042.4
85°	814.6	793.2	860.1	790.5	793.2
87.5°	610.9	621.7	629.7	624.3	594.9
90°	487.7	519.8	495.7	514.5	479.6
92.5°	428.7	455.5	455.5	463.6	418.0
95°	372.5	399.3	415.3	393.9	369.8
97.5°	324.2	351.0	369.8	351.0	324.2
100°	278.7	297.4	316.2	292.1	273.3
102.5°	233.1	241.2	246.5	241.2	230.4
105°	179.5	171.5	166.1	174.2	179.5
107.5°	125.9	117.9	99.1	117.9	131.3
110°	75.0	69.7	59.0	69.7	80.4



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CATALOG NUMBER: BMK-30-WCL-UNV-L750-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	37.5	34.8	34.8	37.5	40.2
115°	13.4	16.1	18.8	16.1	13.4
117.5°	5.4	8.0	8.0	8.0	5.4
120°	5.4	5.4	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)