

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: P276686

Luminaire Tested: **24CZ2-75HE-S-UNV-L92765-W2A1-U-6500K**

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: P276686
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-S-UNV-L92765-W2A1-U-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7111.1 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

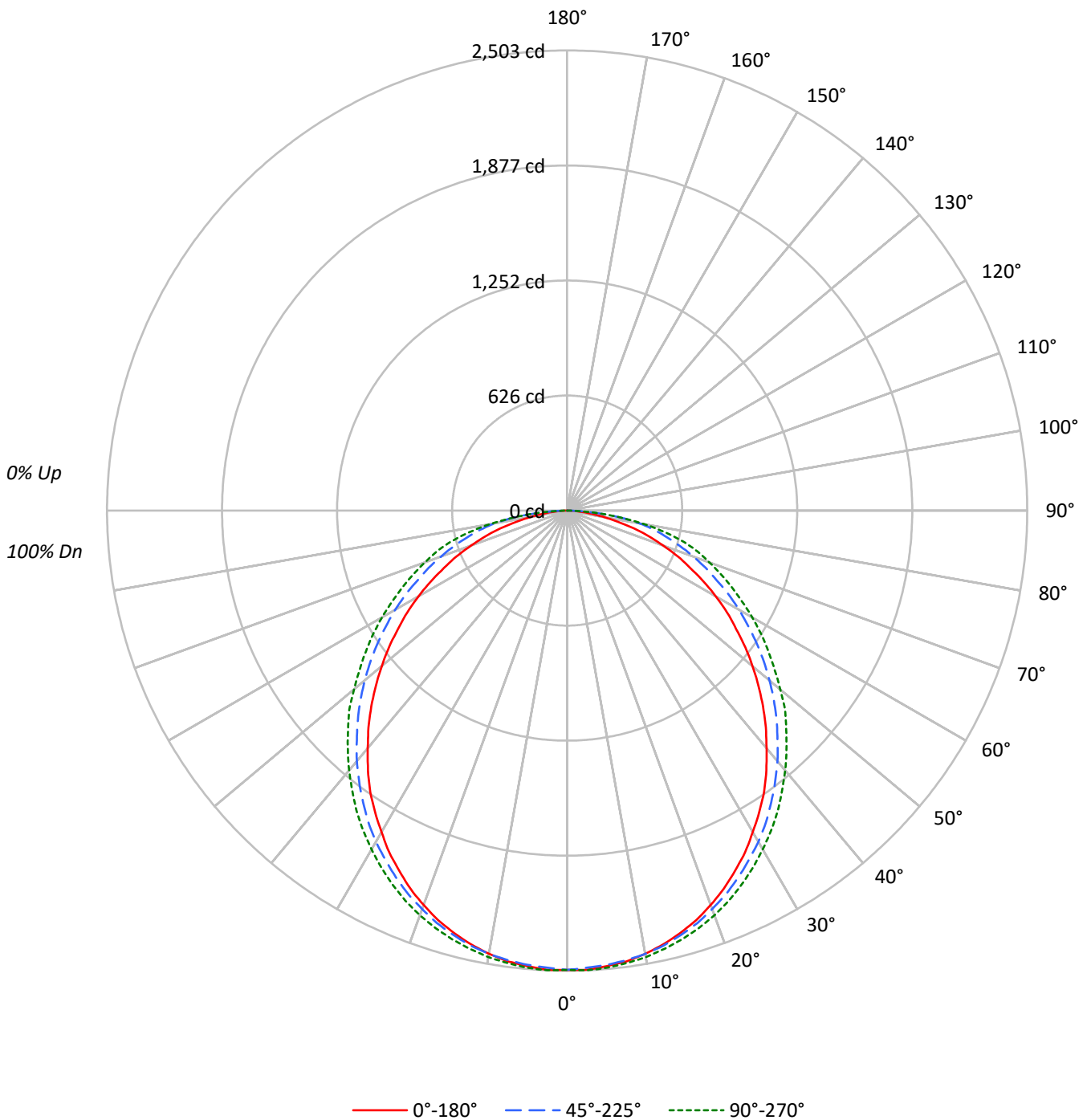
Input Watts (W): 61.101
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3361	3361	3361
5°	3359	3350	3371
10°	3345	3345	3370
15°	3313	3329	3363
20°	3270	3302	3354
25°	3209	3269	3333
30°	3137	3232	3306
35°	3068	3179	3280
40°	2964	3126	3241
45°	2867	3064	3206
50°	2756	3007	3168
55°	2633	2951	3137
60°	2510	2905	3130
65°	2351	2855	3150
70°	2177	2870	3234
75°	1949	2924	3417
80°	1575	3098	3343
85°	1186	2720	2651



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.5	3.3
10°-20°	675.8	9.5
20°-30°	1015.8	14.3
30°-40°	1210.0	17.0
40°-50°	1238.4	17.4
50°-60°	1114.9	15.7
60°-70°	875.6	12.3
70°-80°	568.3	8.0
80°-90°	175.7	2.5
90°-100°	0.0	0.0
100°-110°	0.0	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°	1928.1	27.1
0°-40°	3138.1	44.1
0°-60°	5491.5	77.2
0°-90°	7111.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7111.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2498	2498	2498	2498	2498	
5°	2487	2491	2480	2494	2496	236
15°	2378	2385	2390	2410	2415	671
25°	2162	2180	2202	2238	2245	996
35°	1868	1891	1936	1983	1997	1165
45°	1507	1543	1610	1672	1685	1162
55°	1123	1172	1258	1324	1337	1006
65°	739	795	897	971	989	735
75°	375	447	562	639	657	397
85°	77	142	176	172	172	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2498.2	2498.2	2498.2	2498.2	2498.2
2.5°	2500.4	2500.4	2489.1	2500.4	2502.7
5°	2486.9	2491.4	2480.1	2493.6	2495.9
7.5°	2473.3	2473.3	2466.5	2480.1	2482.3
10°	2448.5	2450.7	2448.5	2464.3	2466.5
12.5°	2416.8	2421.4	2423.6	2439.4	2441.7
15°	2378.4	2385.2	2389.7	2410.1	2414.6
17.5°	2335.5	2342.3	2353.6	2376.2	2380.7
20°	2283.6	2292.6	2306.2	2335.5	2342.3
22.5°	2227.1	2236.1	2258.7	2285.8	2297.1
25°	2161.6	2179.7	2202.3	2238.4	2245.2
27.5°	2096.1	2111.9	2141.3	2179.7	2188.7
30°	2019.3	2044.1	2080.3	2118.7	2127.7
32.5°	1944.8	1969.6	2012.5	2053.2	2064.5
35°	1868.0	1890.6	1935.7	1983.2	1996.7
37.5°	1779.9	1809.2	1858.9	1906.4	1919.9
40°	1687.3	1723.4	1779.9	1829.6	1845.4
42.5°	1599.2	1637.6	1694.0	1748.3	1766.3
45°	1506.6	1542.7	1610.5	1671.5	1685.0
47.5°	1411.7	1452.4	1524.6	1585.6	1608.2
50°	1316.8	1359.8	1436.6	1499.8	1513.3
52.5°	1222.0	1267.1	1348.5	1416.2	1423.0
55°	1122.6	1172.3	1258.1	1323.6	1337.2
57.5°	1032.2	1075.2	1167.8	1235.5	1251.3
60°	932.9	980.3	1079.7	1142.9	1163.2
62.5°	838.0	887.7	991.6	1054.8	1072.9
65°	738.6	795.1	896.7	971.3	989.3
67.5°	652.8	707.0	815.4	887.7	905.7
70°	553.4	614.4	729.6	804.1	822.2
72.5°	467.6	530.8	646.0	718.3	745.4
75°	374.9	447.2	562.4	639.2	657.3
77.5°	284.6	368.2	485.6	544.4	544.4
80°	203.3	291.4	399.8	426.9	431.4
82.5°	133.3	219.1	295.9	293.6	293.6
85°	76.8	142.3	176.2	171.7	171.7
87.5°	29.4	58.7	63.2	63.2	61.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)