

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: P275934

Luminaire Tested: **24CZ2-70HE-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275934
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-70HE-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7004.0 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

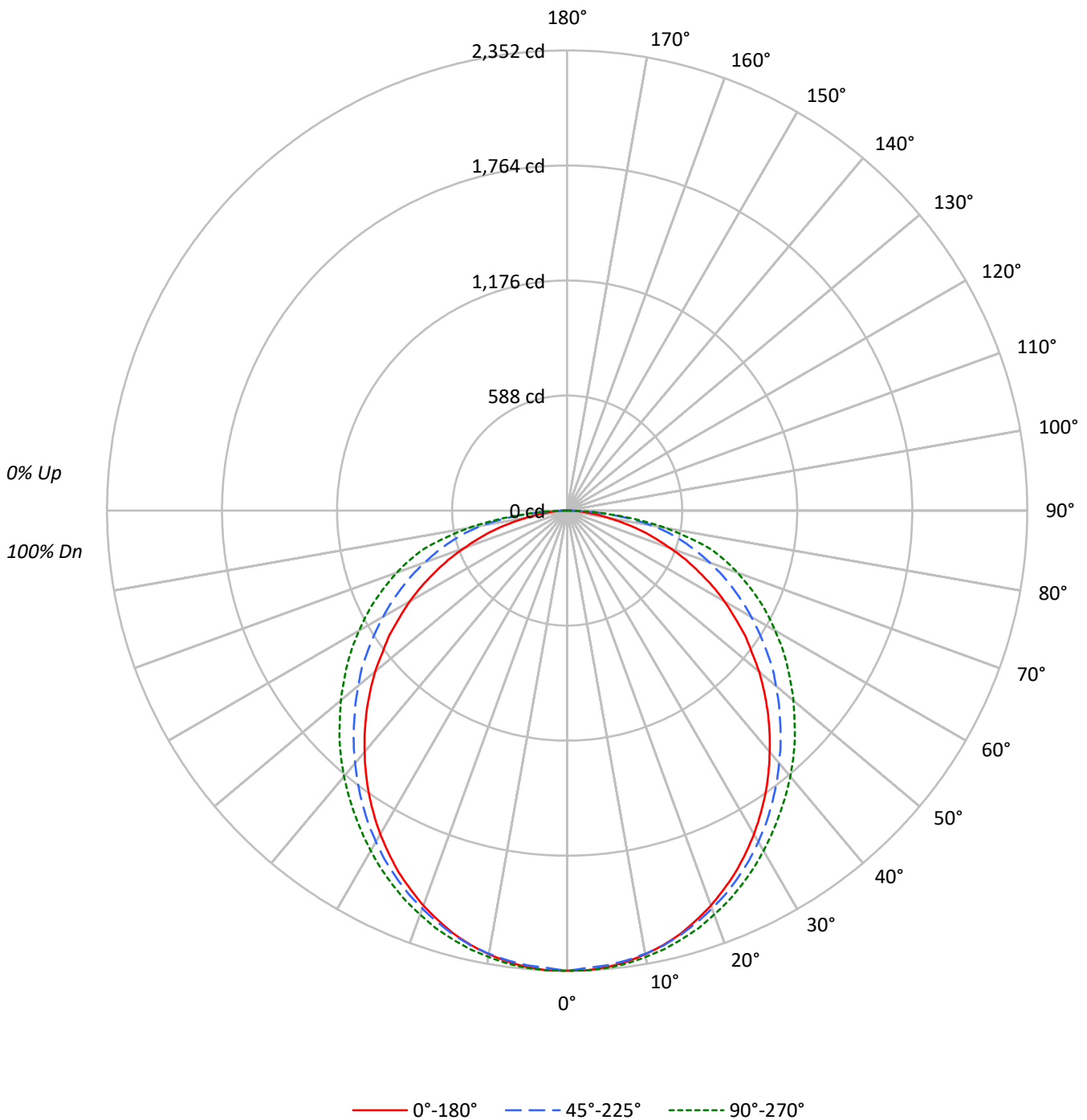
Input Watts (W): 54.87
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3164	3164	3164
5°	3163	3151	3170
10°	3146	3143	3165
15°	3119	3126	3158
20°	3076	3099	3146
25°	3026	3071	3134
30°	2967	3036	3120
35°	2903	2999	3110
40°	2829	2960	3116
45°	2758	2931	3131
50°	2681	2916	3161
55°	2599	2912	3219
60°	2497	2925	3302
65°	2366	2969	3446
70°	2198	3044	3642
75°	2005	3196	3949
80°	1648	3441	3949
85°	1263	3176	3392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.4	3.2
10°-20°	634.9	9.1
20°-30°	955.5	13.6
30°-40°	1145.0	16.3
40°-50°	1193.3	17.0
50°-60°	1110.2	15.9
60°-70°	914.4	13.1
70°-80°	622.7	8.9
80°-90°	205.6	2.9
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°	1812.8	25.9
0°-40°	2957.9	42.2
0°-60°	5261.3	75.1
0°-90°	7004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2352	2352	2352	2352	2352	
5°	2342	2342	2333	2345	2347	222
15°	2239	2242	2244	2265	2267	631
25°	2038	2048	2069	2104	2111	938
35°	1767	1788	1826	1875	1893	1105
45°	1449	1480	1540	1618	1646	1118
55°	1108	1145	1241	1339	1372	988
65°	743	806	933	1042	1082	738
75°	386	472	615	725	760	407
85°	82	159	206	220	220	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2351.6	2351.6	2351.6	2351.6	2351.6
2.5°	2351.6	2351.6	2339.9	2351.6	2351.6
5°	2342.2	2342.2	2332.9	2344.6	2346.9
7.5°	2325.9	2328.2	2318.8	2332.9	2335.2
10°	2302.5	2304.8	2300.1	2314.2	2316.5
12.5°	2274.4	2276.8	2276.8	2293.1	2295.5
15°	2239.4	2241.7	2244.0	2265.1	2267.4
17.5°	2195.0	2202.0	2206.6	2232.4	2237.0
20°	2148.2	2155.2	2164.6	2192.6	2197.3
22.5°	2094.4	2103.8	2120.2	2150.5	2157.6
25°	2038.3	2047.7	2068.7	2103.8	2110.8
27.5°	1975.2	1989.2	2015.0	2052.4	2061.7
30°	1909.8	1923.8	1954.2	1993.9	2007.9
32.5°	1839.6	1858.3	1893.4	1937.8	1951.8
35°	1767.2	1788.2	1825.6	1874.7	1893.4
37.5°	1690.0	1713.4	1757.8	1811.6	1835.0
40°	1610.6	1638.6	1685.4	1748.5	1774.2
42.5°	1531.1	1556.8	1615.2	1683.0	1711.1
45°	1449.3	1479.7	1540.4	1617.6	1645.6
47.5°	1365.1	1395.5	1468.0	1549.8	1575.5
50°	1281.0	1311.4	1393.2	1479.7	1510.1
52.5°	1189.8	1229.5	1323.0	1409.5	1439.9
55°	1108.0	1145.4	1241.2	1339.4	1372.1
57.5°	1014.5	1058.9	1164.1	1266.9	1302.0
60°	928.0	974.8	1087.0	1192.1	1227.2
62.5°	839.2	890.6	1009.8	1117.3	1157.1
65°	743.3	806.5	932.7	1042.5	1082.3
67.5°	656.8	722.3	855.5	967.7	1002.8
70°	558.7	638.1	773.7	885.9	925.7
72.5°	474.5	554.0	696.6	806.5	846.2
75°	385.7	472.2	614.8	724.6	759.7
77.5°	296.9	392.7	535.3	619.4	631.1
80°	212.7	313.2	444.1	493.2	509.6
82.5°	149.6	240.8	327.3	360.0	369.3
85°	81.8	159.0	205.7	219.7	219.7
87.5°	35.1	67.8	81.8	84.2	86.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)