

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: P276538

Luminaire Tested: **24CZ2-70HE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276538
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: 24CZ2-70HE-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7120.0 lumens
Efficiency: N/A
Efficacy: 130.2 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

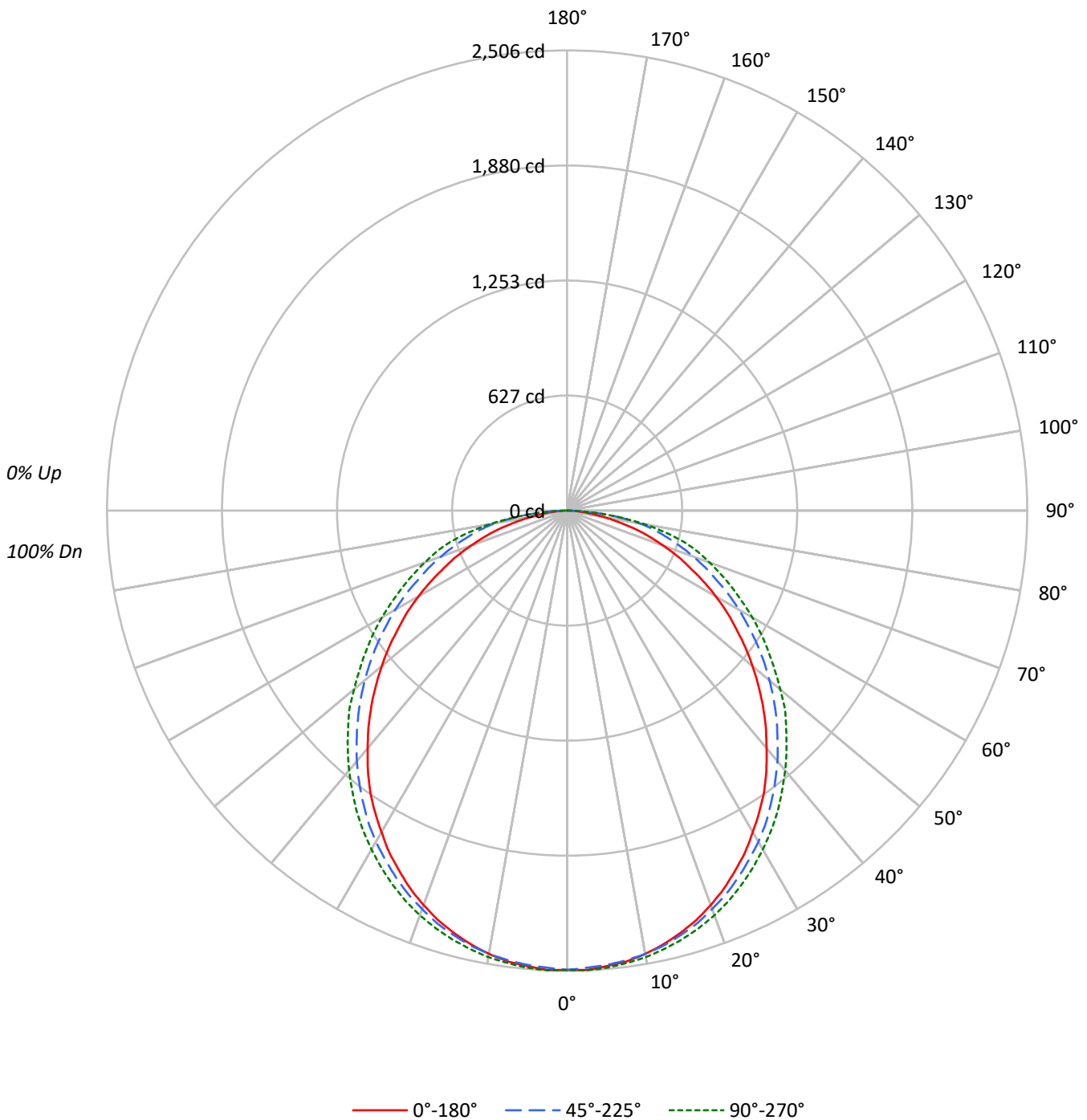
Input Watts (W): 54.684
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3365	3365	3365
5°	3363	3354	3375
10°	3349	3349	3374
15°	3317	3333	3368
20°	3274	3306	3358
25°	3213	3274	3337
30°	3141	3236	3310
35°	3072	3184	3284
40°	2967	3130	3245
45°	2870	3068	3210
50°	2760	3011	3172
55°	2637	2955	3141
60°	2513	2909	3134
65°	2354	2858	3154
70°	2180	2874	3238
75°	1952	2927	3421
80°	1577	3102	3347
85°	1187	2723	2654



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.8	3.3
10°-20°	676.6	9.5
20°-30°	1017.1	14.3
30°-40°	1211.5	17.0
40°-50°	1240.0	17.4
50°-60°	1116.3	15.7
60°-70°	876.7	12.3
70°-80°	569.0	8.0
80°-90°	176.0	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°	1930.5	27.1
0°-40°	3142.1	44.1
0°-60°	5498.4	77.2
0°-90°	7120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2501	2501	2501	2501	2501	
5°	2490	2494	2483	2497	2499	237
15°	2381	2388	2393	2413	2418	671
25°	2164	2182	2205	2241	2248	997
35°	1870	1893	1938	1986	1999	1167
45°	1508	1545	1612	1674	1687	1163
55°	1124	1174	1260	1325	1339	1008
65°	740	796	898	972	991	736
75°	375	448	563	640	658	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°	2501.3	2501.3	2501.3	2501.3	2501.3
2.5°	2503.6	2503.6	2492.2	2503.6	2505.8
5°	2490.0	2494.5	2483.2	2496.8	2499.0
7.5°	2476.4	2476.4	2469.6	2483.2	2485.5
10°	2451.5	2453.8	2451.5	2467.4	2469.6
12.5°	2419.9	2424.4	2426.7	2442.5	2444.8
15°	2381.4	2388.2	2392.7	2413.1	2417.6
17.5°	2338.5	2345.2	2356.6	2379.2	2383.7
20°	2286.4	2295.5	2309.1	2338.5	2345.2
22.5°	2229.9	2239.0	2261.6	2288.7	2300.0
25°	2164.3	2182.4	2205.0	2241.2	2248.0
27.5°	2098.7	2114.6	2144.0	2182.4	2191.5
30°	2021.8	2046.7	2082.9	2121.4	2130.4
32.5°	1947.2	1972.1	2015.1	2055.8	2067.1
35°	1870.3	1892.9	1938.2	1985.7	1999.2
37.5°	1782.1	1811.5	1861.3	1908.8	1922.3
40°	1689.4	1725.6	1782.1	1831.9	1847.7
42.5°	1601.2	1639.6	1696.2	1750.5	1768.5
45°	1508.5	1544.7	1612.5	1673.6	1687.1
47.5°	1413.5	1454.2	1526.6	1587.6	1610.2
50°	1318.5	1361.5	1438.4	1501.7	1515.3
52.5°	1223.5	1268.7	1350.2	1418.0	1424.8
55°	1124.0	1173.8	1259.7	1325.3	1338.8
57.5°	1033.5	1076.5	1169.2	1237.1	1252.9
60°	934.0	981.5	1081.0	1144.4	1164.7
62.5°	839.0	888.8	992.8	1056.2	1074.2
65°	739.5	796.1	897.8	972.5	990.6
67.5°	653.6	707.9	816.4	888.8	906.9
70°	554.1	615.1	730.5	805.1	823.2
72.5°	468.1	531.5	646.8	719.2	746.3
75°	375.4	447.8	563.1	640.0	658.1
77.5°	285.0	368.6	486.2	545.0	545.0
80°	203.5	291.7	400.3	427.4	432.0
82.5°	133.4	219.4	296.3	294.0	294.0
85°	76.9	142.5	176.4	171.9	171.9
87.5°	29.4	58.8	63.3	63.3	61.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)