

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: P276117

Luminaire Tested: **24CZ2-70HE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276117
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-L82765-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: 6658.0 lumens
Efficiency: N/A
Efficacy: 122.6 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

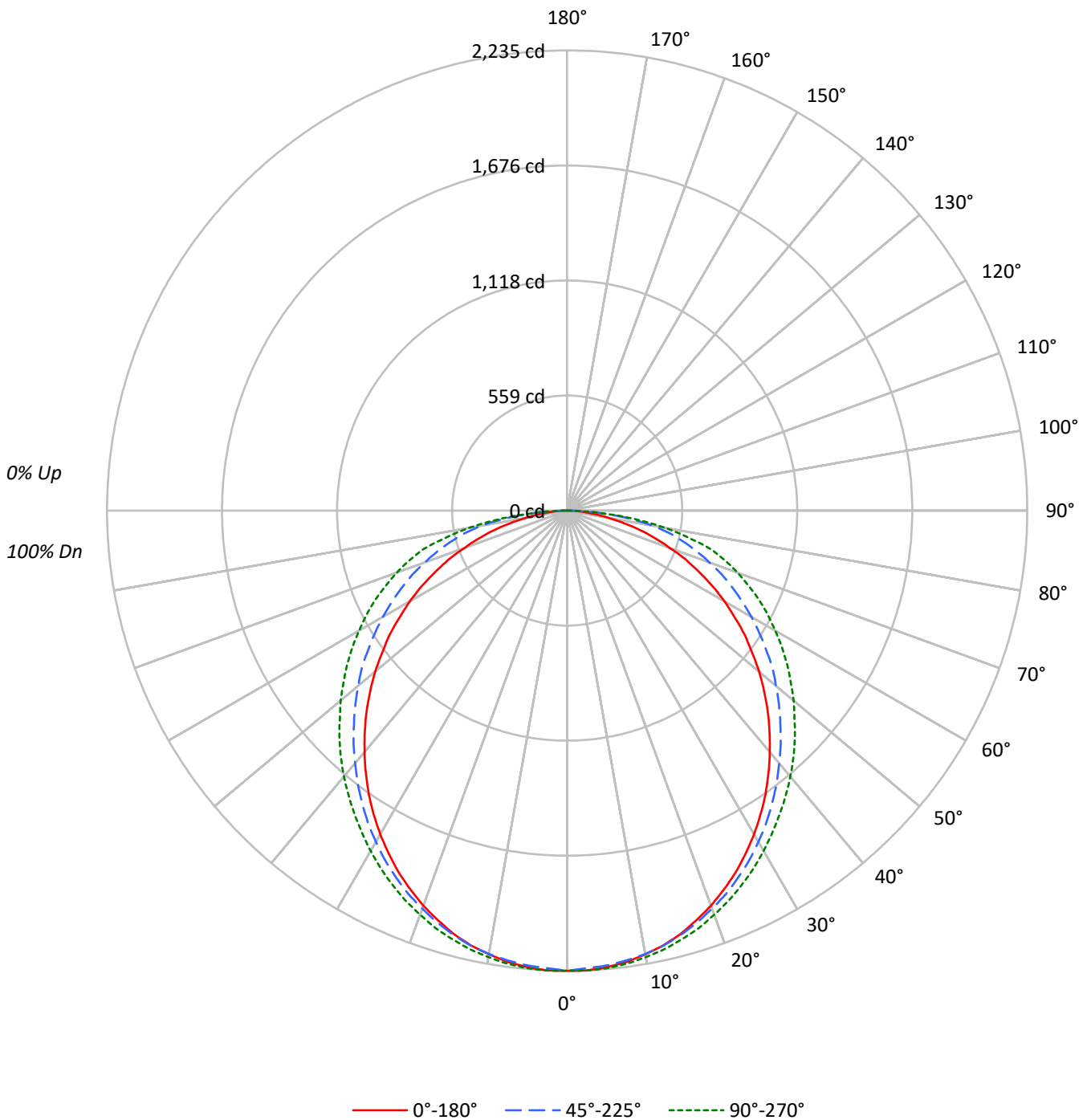
Input Watts (W): 54.312
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3008	3008	3008
5°	3007	2995	3013
10°	2990	2987	3009
15°	2965	2971	3002
20°	2924	2946	2991
25°	2877	2919	2979
30°	2820	2886	2965
35°	2759	2850	2956
40°	2689	2814	2962
45°	2622	2786	2977
50°	2549	2772	3005
55°	2471	2768	3060
60°	2374	2781	3139
65°	2250	2823	3275
70°	2089	2893	3461
75°	1906	3038	3754
80°	1567	3271	3753
85°	1201	3018	3225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.4	3.2
10°-20°	603.6	9.1
20°-30°	908.3	13.6
30°-40°	1088.5	16.3
40°-50°	1134.3	17.0
50°-60°	1055.3	15.9
60°-70°	869.2	13.1
70°-80°	592.0	8.9
80°-90°	195.4	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°	1723.3	25.9
0°-40°	2811.7	42.2
0°-60°	5001.4	75.1
0°-90°	6658.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6658.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2235	2235	2235	2235	2235	
5°	2226	2226	2218	2229	2231	211
15°	2129	2131	2133	2153	2155	600
25°	1938	1946	1966	2000	2006	892
35°	1680	1700	1735	1782	1800	1050
45°	1378	1407	1464	1538	1564	1063
55°	1053	1089	1180	1273	1304	939
65°	707	767	887	991	1029	701
75°	367	449	584	689	722	387
85°	78	151	196	209	209	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2235.4	2235.4	2235.4	2235.4	2235.4
2.5°	2235.4	2235.4	2224.3	2235.4	2235.4
5°	2226.5	2226.5	2217.6	2228.7	2230.9
7.5°	2210.9	2213.2	2204.3	2217.6	2219.8
10°	2188.7	2190.9	2186.5	2199.8	2202.1
12.5°	2162.1	2164.3	2164.3	2179.8	2182.1
15°	2128.7	2130.9	2133.2	2153.2	2155.4
17.5°	2086.5	2093.2	2097.6	2122.1	2126.5
20°	2042.1	2048.7	2057.6	2084.3	2088.7
22.5°	1991.0	1999.8	2015.4	2044.3	2051.0
25°	1937.6	1946.5	1966.5	1999.8	2006.5
27.5°	1877.6	1891.0	1915.4	1951.0	1959.8
30°	1815.4	1828.7	1857.6	1895.4	1908.7
32.5°	1748.8	1766.5	1799.9	1842.1	1855.4
35°	1679.9	1699.9	1735.4	1782.1	1799.9
37.5°	1606.5	1628.8	1671.0	1722.1	1744.3
40°	1531.0	1557.7	1602.1	1662.1	1686.5
42.5°	1455.4	1479.9	1535.4	1599.9	1626.5
45°	1377.7	1406.6	1464.3	1537.7	1564.3
47.5°	1297.7	1326.6	1395.4	1473.2	1497.7
50°	1217.7	1246.6	1324.3	1406.6	1435.4
52.5°	1131.0	1168.8	1257.7	1339.9	1368.8
55°	1053.3	1088.8	1179.9	1273.2	1304.3
57.5°	964.4	1006.6	1106.6	1204.4	1237.7
60°	882.2	926.6	1033.3	1133.2	1166.6
62.5°	797.7	846.6	959.9	1062.1	1099.9
65°	706.6	766.6	886.6	991.0	1028.8
67.5°	624.4	686.6	813.3	919.9	953.3
70°	531.1	606.6	735.5	842.2	879.9
72.5°	451.1	526.6	662.2	766.6	804.4
75°	366.6	448.9	584.4	688.8	722.2
77.5°	282.2	373.3	508.8	588.8	600.0
80°	202.2	297.8	422.2	468.9	484.4
82.5°	142.2	228.9	311.1	342.2	351.1
85°	77.8	151.1	195.5	208.9	208.9
87.5°	33.3	64.4	77.8	80.0	82.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)