

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: P276535

Luminaire Tested: **24CZ2-70HE-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276535
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-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6617.0 lumens
Efficiency: N/A
Efficacy: 124.2 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

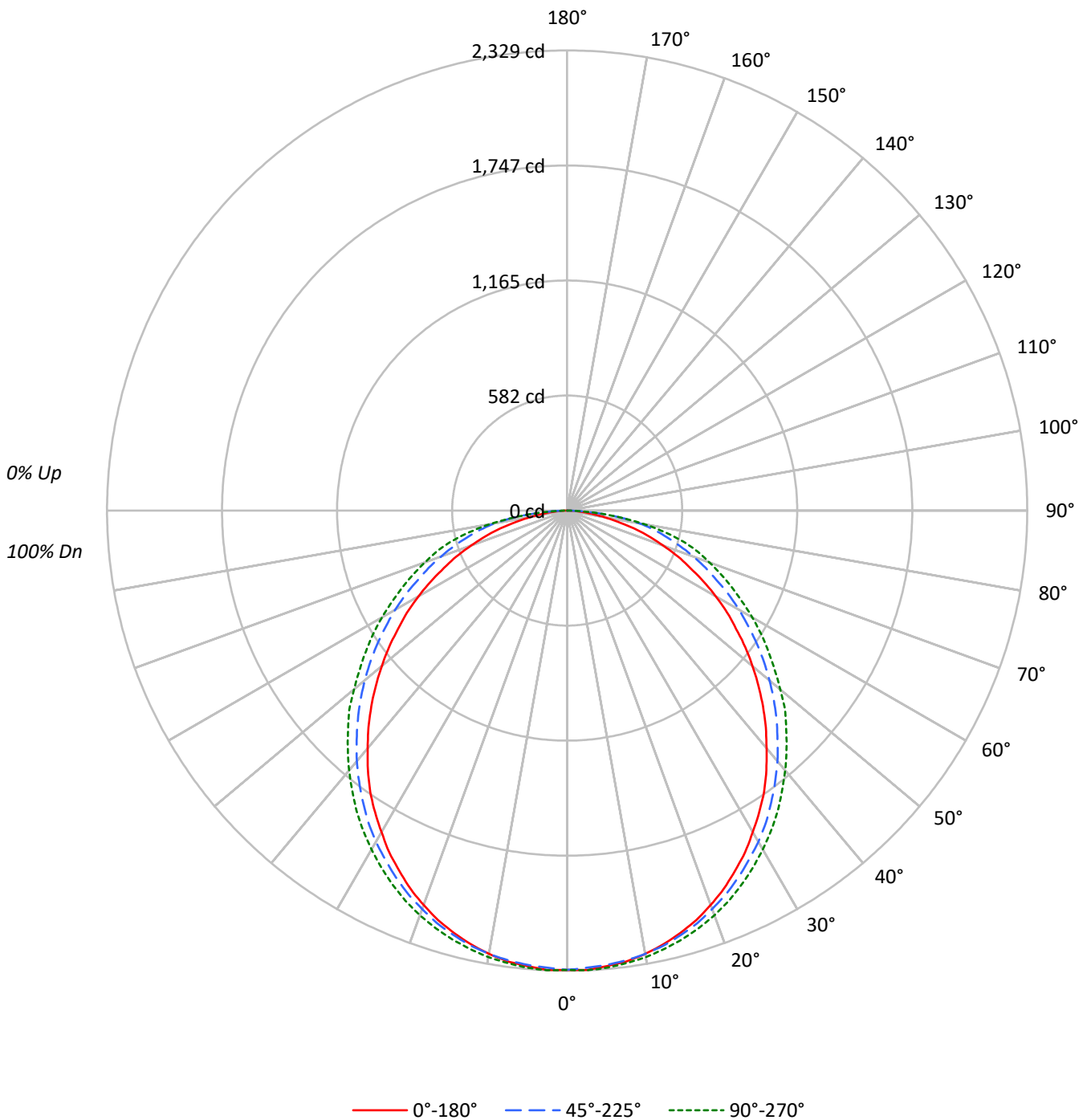
Input Watts (W): 53.289
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3128	3128	3128
5°	3125	3117	3137
10°	3113	3113	3136
15°	3083	3098	3130
20°	3043	3073	3121
25°	2986	3042	3102
30°	2919	3008	3076
35°	2855	2959	3052
40°	2758	2909	3016
45°	2668	2852	2984
50°	2565	2798	2948
55°	2450	2746	2919
60°	2336	2704	2913
65°	2188	2656	2931
70°	2026	2671	3010
75°	1814	2721	3179
80°	1466	2882	3110
85°	1104	2530	2465



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.1	3.3
10°-20°	628.8	9.5
20°-30°	945.3	14.3
30°-40°	1126.0	17.0
40°-50°	1152.4	17.4
50°-60°	1037.5	15.7
60°-70°	814.7	12.3
70°-80°	528.8	8.0
80°-90°	163.5	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°	1794.2	27.1
0°-40°	2920.1	44.1
0°-60°	5110.0	77.2
0°-90°	6617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6617.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2325	2325	2325	2325	2325	
5°	2314	2318	2308	2320	2322	220
15°	2213	2220	2224	2243	2247	624
25°	2011	2028	2049	2083	2089	927
35°	1738	1759	1801	1845	1858	1084
45°	1402	1436	1499	1555	1568	1081
55°	1045	1091	1171	1232	1244	936
65°	687	740	834	904	921	684
75°	349	416	523	595	612	369
85°	72	132	164	160	160	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2324.6	2324.6	2324.6	2324.6	2324.6
2.5°	2326.7	2326.7	2316.2	2326.7	2328.8
5°	2314.1	2318.3	2307.8	2320.4	2322.5
7.5°	2301.5	2301.5	2295.2	2307.8	2309.9
10°	2278.4	2280.5	2278.4	2293.1	2295.2
12.5°	2248.9	2253.1	2255.2	2270.0	2272.1
15°	2213.2	2219.5	2223.7	2242.6	2246.8
17.5°	2173.3	2179.6	2190.1	2211.1	2215.3
20°	2124.9	2133.3	2145.9	2173.3	2179.6
22.5°	2072.4	2080.8	2101.8	2127.0	2137.5
25°	2011.4	2028.2	2049.3	2082.9	2089.2
27.5°	1950.5	1965.2	1992.5	2028.2	2036.7
30°	1879.0	1902.1	1935.8	1971.5	1979.9
32.5°	1809.7	1832.8	1872.7	1910.5	1921.1
35°	1738.2	1759.2	1801.3	1845.4	1858.0
37.5°	1656.2	1683.6	1729.8	1773.9	1786.5
40°	1570.1	1603.7	1656.2	1702.5	1717.2
42.5°	1488.1	1523.8	1576.4	1626.8	1643.6
45°	1401.9	1435.5	1498.6	1555.3	1568.0
47.5°	1313.6	1351.5	1418.7	1475.5	1496.5
50°	1225.4	1265.3	1336.8	1395.6	1408.2
52.5°	1137.1	1179.1	1254.8	1317.8	1324.1
55°	1044.6	1090.8	1170.7	1231.7	1244.3
57.5°	960.5	1000.5	1086.6	1149.7	1164.4
60°	868.0	912.2	1004.7	1063.5	1082.4
62.5°	779.8	826.0	922.7	981.5	998.4
65°	687.3	739.8	834.4	903.8	920.6
67.5°	607.4	657.9	758.8	826.0	842.8
70°	514.9	571.7	678.9	748.2	765.1
72.5°	435.1	493.9	601.1	668.4	693.6
75°	348.9	416.2	523.4	594.8	611.6
77.5°	264.8	342.6	451.9	506.5	506.5
80°	189.2	271.1	372.0	397.2	401.4
82.5°	124.0	203.9	275.3	273.2	273.2
85°	71.5	132.4	163.9	159.7	159.7
87.5°	27.3	54.6	58.9	58.9	56.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)