

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: P277390

Luminaire Tested: **22CZ2-24HE-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-S-UNV-L82765-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2262.0 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

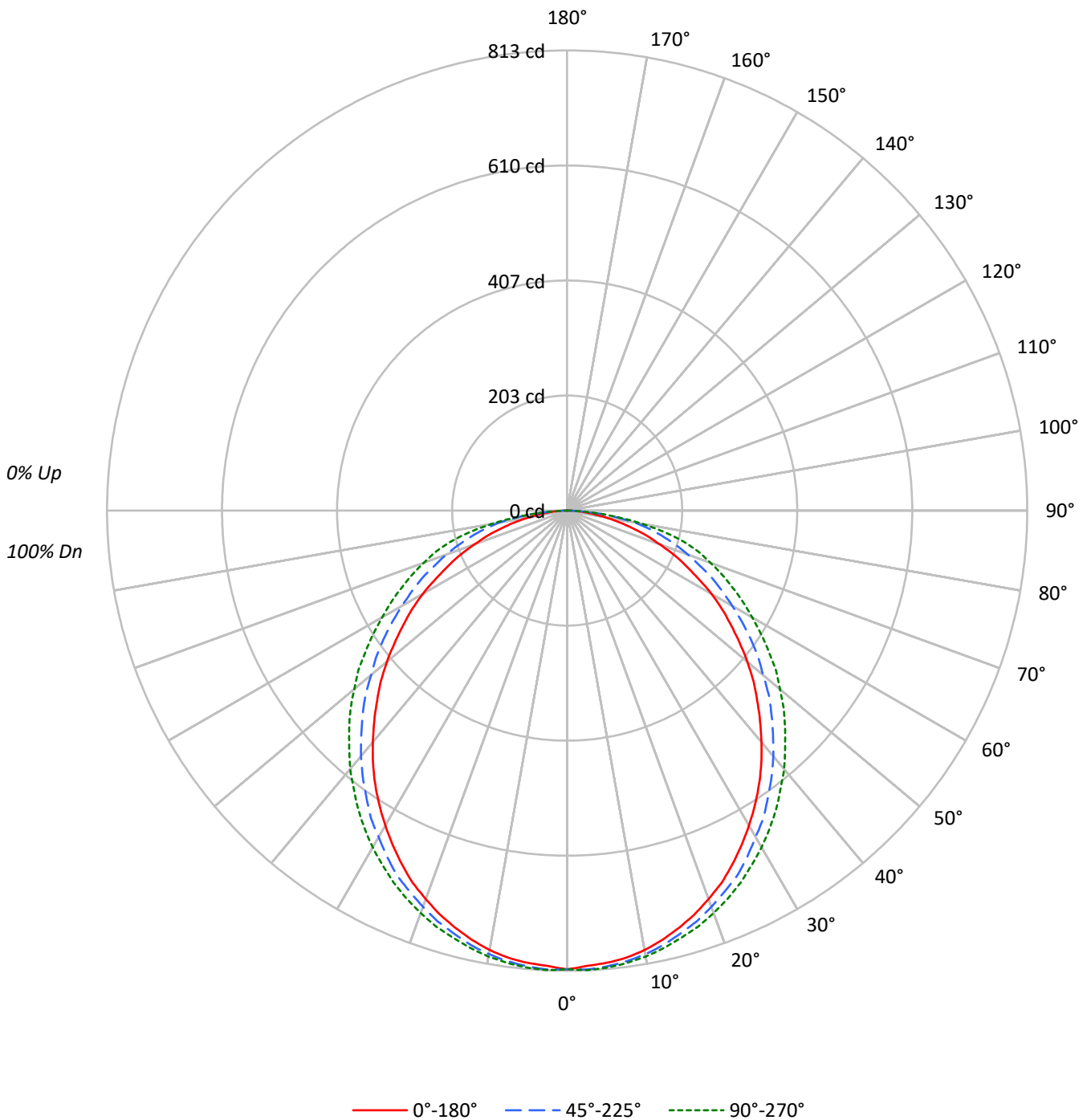
Input Watts (W): 17.484
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2181	2181	2181
5°	2167	2184	2189
10°	2154	2175	2186
15°	2126	2155	2176
20°	2091	2134	2167
25°	2049	2112	2153
30°	1997	2069	2135
35°	1941	2032	2115
40°	1876	1991	2095
45°	1807	1944	2073
50°	1741	1891	2055
55°	1659	1857	2040
60°	1585	1812	2033
65°	1479	1801	2057
70°	1362	1785	2117
75°	1229	1810	2227
80°	1063	1864	2094
85°	880	1565	1565



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	3.4
10°-20°	218.1	9.6
20°-30°	326.4	14.4
30°-40°	386.5	17.1
40°-50°	393.9	17.4
50°-60°	353.1	15.6
60°-70°	276.4	12.2
70°-80°	178.2	7.9
80°-90°	52.6	2.3
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°	621.2	27.5
0°-40°	1007.7	44.5
0°-60°	1754.7	77.6
0°-90°	2262.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	802	804	808	810	810	76
15°	763	767	774	780	781	215
25°	690	697	711	721	725	318
35°	591	598	618	638	644	369
45°	475	486	511	537	545	367
55°	354	365	396	423	435	317
65°	232	246	283	310	323	231
75°	118	136	174	204	214	127
85°	28	39	51	51	51	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	810.5	810.5	810.5	810.5	810.5
2.5°	805.3	807.4	811.6	812.7	812.7
5°	802.1	804.2	808.4	809.5	810.5
7.5°	796.8	797.9	803.2	805.3	806.3
10°	788.4	790.5	795.8	798.9	800.0
12.5°	776.8	779.9	786.3	790.5	791.5
15°	763.1	767.3	773.6	779.9	781.0
17.5°	748.3	752.5	760.9	768.3	770.4
20°	730.3	735.6	745.1	753.6	756.7
22.5°	712.4	716.6	728.2	738.8	741.9
25°	690.2	696.6	711.3	720.8	725.1
27.5°	667.0	674.4	689.2	701.8	706.1
30°	642.7	650.1	666.0	681.8	687.1
32.5°	617.4	625.9	644.8	660.7	666.0
35°	591.0	598.4	618.5	637.5	643.8
37.5°	563.6	569.9	593.1	613.2	619.5
40°	534.0	542.5	566.7	590.0	596.3
42.5°	504.5	514.0	538.3	563.6	569.9
45°	474.9	485.5	510.8	537.2	544.6
47.5°	446.4	454.9	483.4	508.7	519.3
50°	415.8	424.3	451.7	480.2	490.8
52.5°	384.2	395.8	425.3	452.8	465.4
55°	353.6	365.2	395.8	423.2	434.8
57.5°	325.1	334.6	366.2	394.7	406.3
60°	294.5	302.9	336.7	367.3	377.8
62.5°	261.7	274.4	309.2	337.7	350.4
65°	232.2	245.9	282.8	310.3	323.0
67.5°	204.7	217.4	253.3	282.8	296.6
70°	173.1	190.0	226.9	256.5	269.1
72.5°	147.8	162.5	200.5	230.1	243.8
75°	118.2	136.1	174.1	203.7	214.2
77.5°	93.9	111.9	147.8	171.0	176.3
80°	68.6	86.5	120.3	131.9	135.1
82.5°	46.4	63.3	86.5	89.7	90.8
85°	28.5	39.0	50.7	50.7	50.7
87.5°	13.7	15.8	17.9	16.9	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)