

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: P277454

Luminaire Tested: **22CZ2-29HE-S-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277454
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: 22CZ2-29HE-S-UNV-L92765-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2396.0 lumens
Efficiency: N/A
Efficacy: 114.5 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

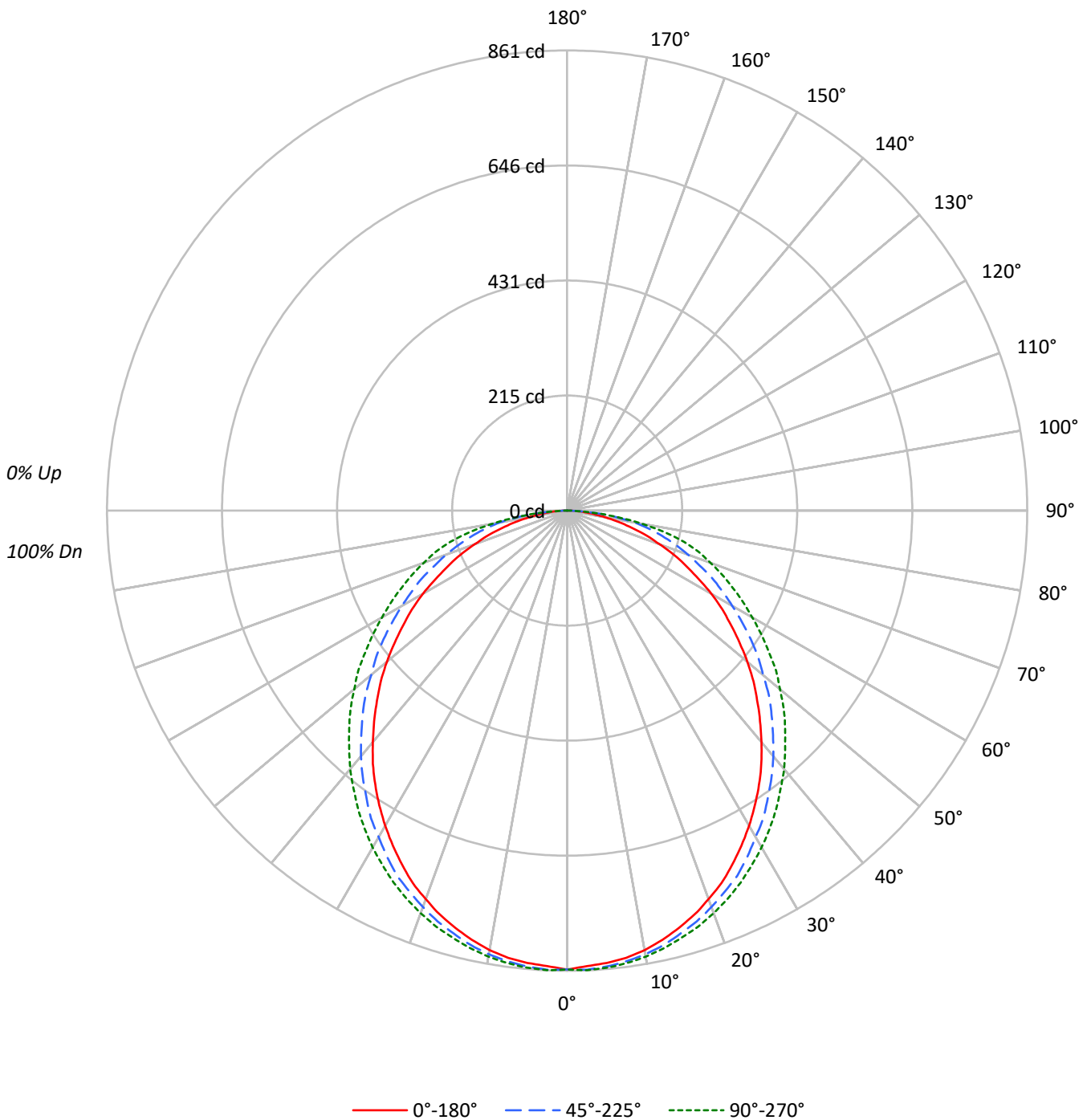
Input Watts (W): 20.925
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2310	2310	2310
5°	2295	2313	2319
10°	2282	2303	2316
15°	2252	2283	2305
20°	2215	2260	2295
25°	2171	2237	2280
30°	2115	2192	2261
35°	2056	2152	2240
40°	1987	2109	2219
45°	1915	2059	2195
50°	1844	2003	2176
55°	1757	1967	2161
60°	1679	1919	2154
65°	1566	1908	2178
70°	1442	1891	2243
75°	1302	1918	2359
80°	1127	1974	2218
85°	932	1658	1658



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	3.4
10°-20°	231.1	9.6
20°-30°	345.7	14.4
30°-40°	409.4	17.1
40°-50°	417.2	17.4
50°-60°	374.0	15.6
60°-70°	292.8	12.2
70°-80°	188.8	7.9
80°-90°	55.8	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°	658.0	27.5
0°-40°	1067.4	44.5
0°-60°	1858.6	77.6
0°-90°	2396.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2396.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	850	852	856	857	859	81
15°	808	813	819	826	827	228
25°	731	738	754	764	768	337
35°	626	634	655	675	682	391
45°	503	514	541	569	577	389
55°	374	387	419	448	461	336
65°	246	260	300	329	342	244
75°	125	144	184	216	227	134
85°	30	41	54	54	54	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	858.6	858.6	858.6	858.6	858.6
2.5°	853.0	855.2	859.7	860.8	860.8
5°	849.6	851.9	856.3	857.4	858.6
7.5°	844.0	845.1	850.7	853.0	854.1
10°	835.1	837.3	842.9	846.3	847.4
12.5°	822.8	826.1	832.8	837.3	838.4
15°	808.3	812.7	819.4	826.1	827.3
17.5°	792.6	797.1	806.0	813.8	816.1
20°	773.6	779.2	789.3	798.2	801.5
22.5°	754.6	759.1	771.4	782.5	785.9
25°	731.1	737.8	753.5	763.5	768.0
27.5°	706.5	714.3	730.0	743.4	747.9
30°	680.8	688.6	705.4	722.2	727.8
32.5°	654.0	662.9	683.0	699.8	705.4
35°	626.0	633.9	655.1	675.2	681.9
37.5°	597.0	603.7	628.3	649.5	656.2
40°	565.7	574.6	600.3	624.9	631.6
42.5°	534.4	544.4	570.1	597.0	603.7
45°	503.1	514.2	541.1	569.0	576.8
47.5°	472.9	481.8	512.0	538.8	550.0
50°	440.5	449.4	478.5	508.7	519.8
52.5°	406.9	419.2	450.5	479.6	493.0
55°	374.5	386.8	419.2	448.3	460.6
57.5°	344.3	354.4	387.9	418.1	430.4
60°	311.9	320.8	356.6	389.0	400.2
62.5°	277.2	290.7	327.6	357.7	371.1
65°	245.9	260.5	299.6	328.7	342.1
67.5°	216.9	230.3	268.3	299.6	314.1
70°	183.3	201.2	240.4	271.7	285.1
72.5°	156.5	172.2	212.4	243.7	258.2
75°	125.2	144.2	184.5	215.8	226.9
77.5°	99.5	118.5	156.5	181.1	186.7
80°	72.7	91.7	127.4	139.7	143.1
82.5°	49.2	67.1	91.7	95.0	96.1
85°	30.2	41.4	53.7	53.7	53.7
87.5°	14.5	16.8	19.0	17.9	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)