

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: P277455

Luminaire Tested: **22CZ2-29HE-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277455
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-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2474.0 lumens
Efficiency: N/A
Efficacy: 117.2 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

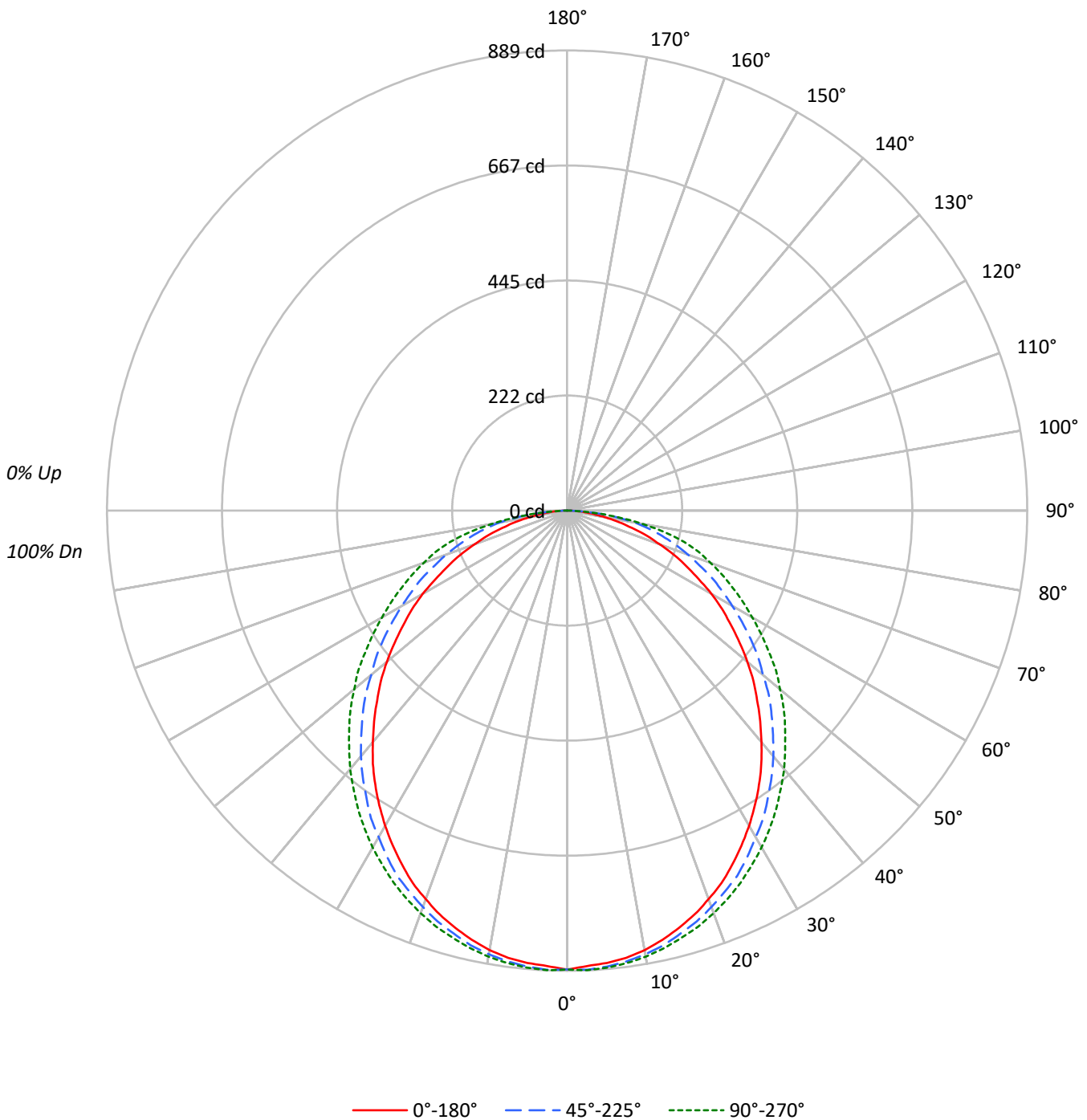
Input Watts (W): 21.111
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2386	2386	2386
5°	2370	2388	2395
10°	2356	2378	2391
15°	2325	2357	2380
20°	2288	2334	2370
25°	2241	2310	2355
30°	2184	2263	2335
35°	2123	2222	2313
40°	2052	2178	2291
45°	1977	2126	2267
50°	1904	2068	2247
55°	1814	2031	2231
60°	1734	1982	2224
65°	1617	1970	2249
70°	1489	1953	2316
75°	1344	1981	2436
80°	1162	2039	2290
85°	963	1711	1711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	3.4
10°-20°	238.6	9.6
20°-30°	357.0	14.4
30°-40°	422.8	17.1
40°-50°	430.8	17.4
50°-60°	386.2	15.6
60°-70°	302.3	12.2
70°-80°	195.0	7.9
80°-90°	57.6	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°	679.4	27.5
0°-40°	1102.2	44.5
0°-60°	1919.1	77.6
0°-90°	2474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2474.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	886	886	886	886	886	
5°	877	880	884	885	886	83
15°	835	839	846	853	854	235
25°	755	762	778	788	793	348
35°	646	654	676	697	704	404
45°	519	531	559	588	596	401
55°	387	399	433	463	476	347
65°	254	269	309	339	353	252
75°	129	149	190	223	234	139
85°	31	43	55	55	55	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	886.5	886.5	886.5	886.5	886.5
2.5°	880.7	883.0	887.7	888.8	888.8
5°	877.3	879.6	884.2	885.4	886.5
7.5°	871.5	872.7	878.4	880.7	881.9
10°	862.3	864.6	870.4	873.8	875.0
12.5°	849.6	853.0	860.0	864.6	865.7
15°	834.6	839.2	846.1	853.0	854.2
17.5°	818.4	823.0	832.3	840.3	842.6
20°	798.8	804.6	814.9	824.2	827.6
22.5°	779.2	783.8	796.5	808.0	811.5
25°	754.9	761.8	778.0	788.4	793.0
27.5°	729.5	737.6	753.8	767.6	772.2
30°	703.0	711.1	728.4	745.7	751.5
32.5°	675.3	684.5	705.3	722.6	728.4
35°	646.4	654.5	676.4	697.2	704.1
37.5°	616.4	623.3	648.7	670.7	677.6
40°	584.1	593.3	619.9	645.3	652.2
42.5°	551.8	562.1	588.7	616.4	623.3
45°	519.4	531.0	558.7	587.5	595.6
47.5°	488.3	497.5	528.7	556.4	567.9
50°	454.8	464.0	494.0	525.2	536.8
52.5°	420.2	432.9	465.2	495.2	509.1
55°	386.7	399.4	432.9	462.9	475.6
57.5°	355.5	365.9	400.5	431.7	444.4
60°	322.1	331.3	368.2	401.7	413.2
62.5°	286.3	300.1	338.2	369.4	383.2
65°	253.9	269.0	309.4	339.4	353.2
67.5°	223.9	237.8	277.0	309.4	324.4
70°	189.3	207.8	248.2	280.5	294.3
72.5°	161.6	177.8	219.3	251.6	266.6
75°	129.3	148.9	190.5	222.8	234.3
77.5°	102.7	122.4	161.6	187.0	192.8
80°	75.0	94.7	131.6	144.3	147.8
82.5°	50.8	69.3	94.7	98.1	99.3
85°	31.2	42.7	55.4	55.4	55.4
87.5°	15.0	17.3	19.6	18.5	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)