

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: P277195

Luminaire Tested: **22CZ2-29HE-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277195
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2481.0 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

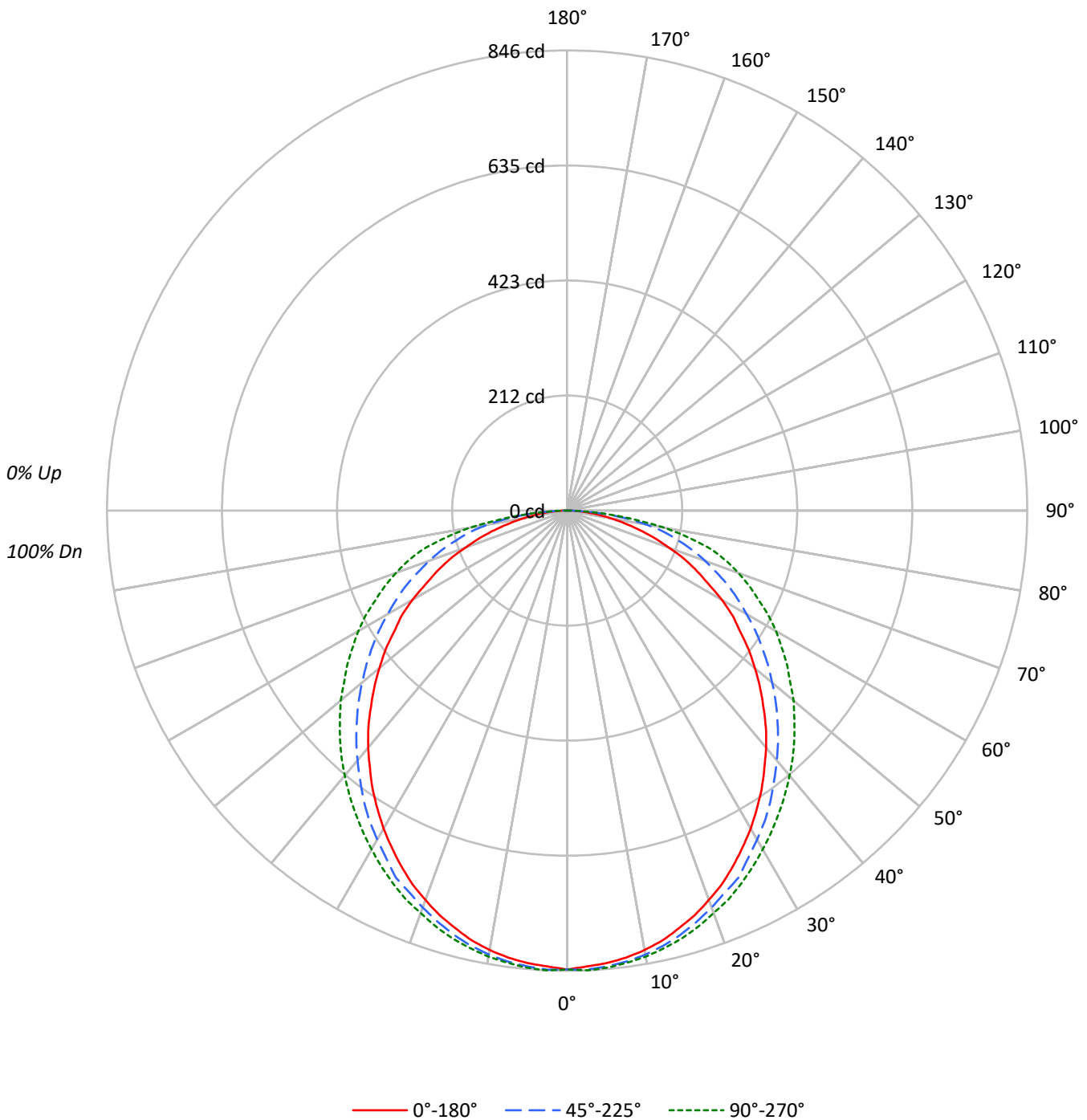
Input Watts (W): 21.706944
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2270	2270	2270
5°	2256	2272	2279
10°	2242	2265	2275
15°	2214	2248	2269
20°	2182	2223	2255
25°	2142	2211	2247
30°	2098	2170	2234
35°	2049	2142	2230
40°	1998	2106	2234
45°	1942	2081	2249
50°	1886	2060	2274
55°	1821	2051	2314
60°	1767	2050	2385
65°	1679	2083	2472
70°	1566	2123	2632
75°	1435	2196	2844
80°	1249	2289	2800
85°	1093	2035	2223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.8	3.2
10°-20°	227.2	9.2
20°-30°	341.1	13.7
30°-40°	407.6	16.4
40°-50°	423.9	17.1
50°-60°	392.9	15.8
60°-70°	322.2	13.0
70°-80°	217.8	8.8
80°-90°	68.4	2.8
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°	648.1	26.1
0°-40°	1055.8	42.6
0°-60°	1872.5	75.5
0°-90°	2481.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2481.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	844	844	844	844	844	
5°	835	836	841	842	844	79
15°	795	798	807	812	814	224
25°	722	728	745	753	757	332
35°	624	632	652	672	679	390
45°	510	520	547	579	591	394
55°	388	400	437	476	493	349
65°	264	278	327	370	388	261
75°	138	161	211	254	274	146
85°	35	49	66	73	72	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	843.6	843.6	843.6	843.6	843.6
2.5°	838.7	841.1	844.8	846.0	846.0
5°	835.0	836.3	841.1	842.4	843.6
7.5°	828.9	831.4	836.3	837.5	838.7
10°	820.4	822.8	828.9	831.4	832.6
12.5°	809.4	811.8	819.2	822.8	824.1
15°	794.8	798.4	807.0	811.8	814.3
17.5°	780.1	783.8	792.3	799.6	802.1
20°	761.8	770.3	776.4	786.2	787.4
22.5°	743.5	748.4	759.3	769.1	774.0
25°	721.5	727.6	744.7	753.2	756.9
27.5°	698.3	706.9	720.3	733.7	738.6
30°	675.1	681.2	698.3	714.2	719.1
32.5°	649.5	658.0	676.3	692.2	699.5
35°	623.8	632.4	651.9	671.5	678.8
37.5°	595.8	605.5	625.1	648.3	658.0
40°	568.9	576.2	599.4	627.5	636.0
42.5°	540.8	549.4	573.8	604.3	614.1
45°	510.3	520.1	546.9	578.7	590.9
47.5°	481.0	490.8	520.1	551.8	566.5
50°	450.5	462.7	492.0	528.6	543.3
52.5°	421.2	432.2	465.1	503.0	516.4
55°	388.2	400.4	437.1	476.1	493.2
57.5°	361.4	369.9	410.2	450.5	467.6
60°	328.4	339.4	380.9	423.6	443.2
62.5°	293.0	311.3	354.0	398.0	417.5
65°	263.7	278.3	327.2	369.9	388.2
67.5°	233.2	249.0	296.7	341.8	362.6
70°	199.0	219.7	269.8	315.0	334.5
72.5°	168.5	190.4	241.7	285.7	306.4
75°	138.0	161.1	211.2	253.9	273.5
77.5°	108.7	134.3	183.1	216.1	228.3
80°	80.6	105.0	147.7	170.9	180.7
82.5°	56.2	76.9	108.7	120.9	123.3
85°	35.4	48.8	65.9	73.2	72.0
87.5°	15.9	19.5	24.4	26.9	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)