

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: P277361

Luminaire Tested: **22CZ2-29HE-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277361
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-L93050-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: 2381.0 lumens
Efficiency: N/A
Efficacy: 112.2 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

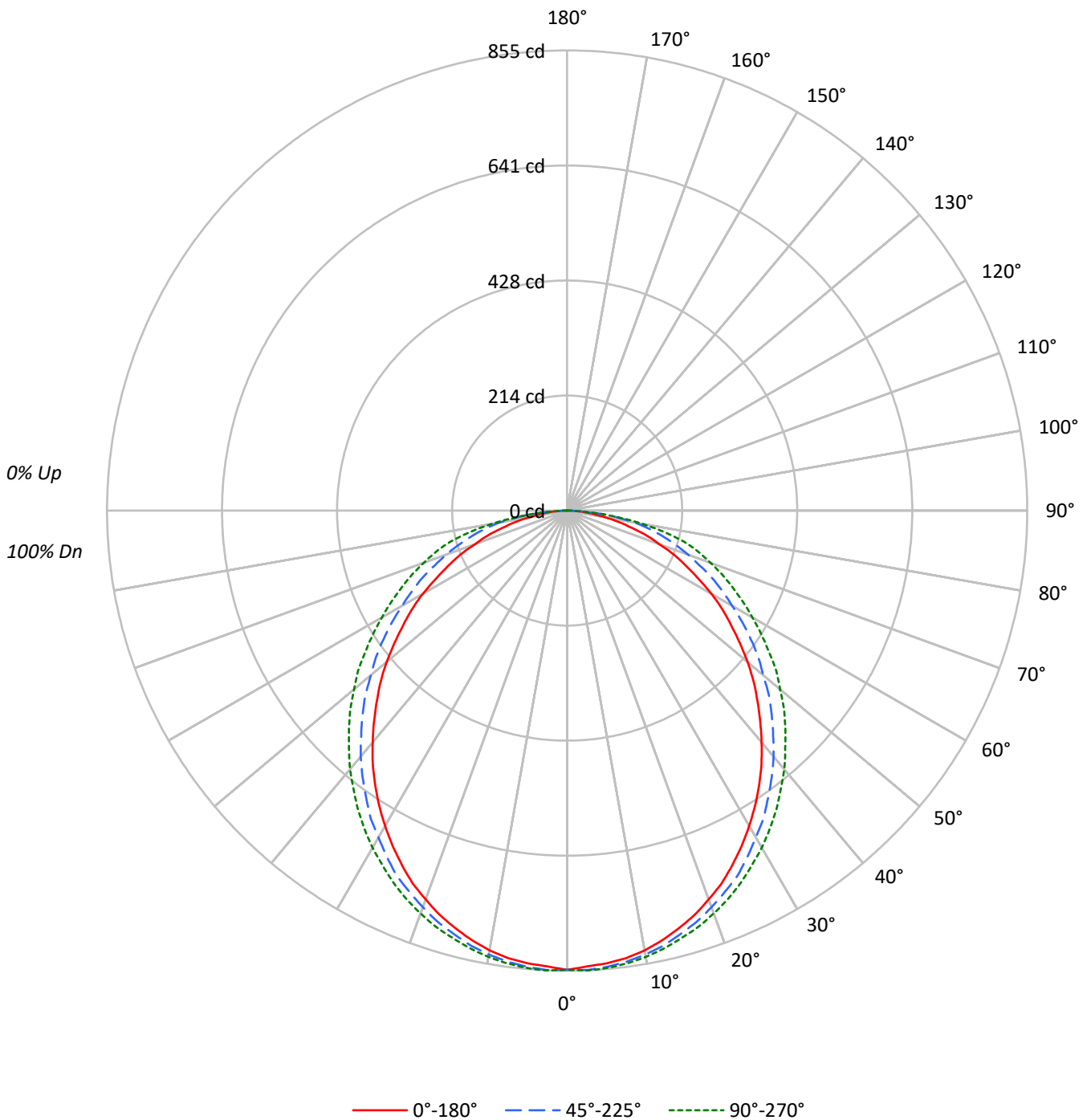
Input Watts (W): 21.227808
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2296	2296	2296
5°	2281	2299	2305
10°	2268	2289	2301
15°	2238	2269	2290
20°	2202	2246	2281
25°	2157	2223	2266
30°	2102	2178	2247
35°	2044	2139	2226
40°	1975	2096	2205
45°	1902	2046	2181
50°	1832	1991	2163
55°	1746	1955	2147
60°	1668	1907	2140
65°	1556	1896	2164
70°	1434	1879	2229
75°	1293	1906	2345
80°	1119	1962	2204
85°	926	1646	1646



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	3.4
10°-20°	229.6	9.6
20°-30°	343.6	14.4
30°-40°	406.9	17.1
40°-50°	414.6	17.4
50°-60°	371.6	15.6
60°-70°	290.9	12.2
70°-80°	187.6	7.9
80°-90°	55.4	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°	653.9	27.5
0°-40°	1060.7	44.5
0°-60°	1847.0	77.6
0°-90°	2381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2381.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	844	846	851	852	853	80
15°	803	808	814	821	822	226
25°	726	733	749	759	763	334
35°	622	630	651	671	678	389
45°	500	511	538	566	573	386
55°	372	384	417	446	458	334
65°	244	259	298	327	340	243
75°	124	143	183	214	226	133
85°	30	41	53	53	53	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.2	853.2	853.2	853.2	853.2
2.5°	847.6	849.9	854.3	855.4	855.4
5°	844.3	846.5	851.0	852.1	853.2
7.5°	838.7	839.9	845.4	847.6	848.7
10°	829.9	832.1	837.6	841.0	842.1
12.5°	817.6	821.0	827.6	832.1	833.2
15°	803.2	807.6	814.3	821.0	822.1
17.5°	787.6	792.1	801.0	808.7	811.0
20°	768.8	774.3	784.3	793.2	796.5
22.5°	749.9	754.3	766.5	777.6	781.0
25°	726.5	733.2	748.8	758.8	763.2
27.5°	702.1	709.9	725.4	738.8	743.2
30°	676.6	684.3	701.0	717.7	723.2
32.5°	649.9	658.8	678.8	695.4	701.0
35°	622.1	629.9	651.0	671.0	677.7
37.5°	593.2	599.9	624.3	645.4	652.1
40°	562.1	571.0	596.6	621.0	627.7
42.5°	531.0	541.0	566.6	593.2	599.9
45°	499.9	511.0	537.7	565.5	573.2
47.5°	469.9	478.8	508.8	535.5	546.6
50°	437.7	446.6	475.5	505.5	516.6
52.5°	404.4	416.6	447.7	476.6	489.9
55°	372.2	384.4	416.6	445.5	457.7
57.5°	342.2	352.2	385.5	415.5	427.7
60°	309.9	318.8	354.4	386.6	397.7
62.5°	275.5	288.8	325.5	355.5	368.8
65°	244.4	258.8	297.7	326.6	339.9
67.5°	215.5	228.8	266.6	297.7	312.2
70°	182.2	200.0	238.8	270.0	283.3
72.5°	155.5	171.1	211.1	242.2	256.6
75°	124.4	143.3	183.3	214.4	225.5
77.5°	98.9	117.8	155.5	180.0	185.5
80°	72.2	91.1	126.6	138.9	142.2
82.5°	48.9	66.7	91.1	94.4	95.5
85°	30.0	41.1	53.3	53.3	53.3
87.5°	14.4	16.7	18.9	17.8	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)