

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: P388249

Luminaire Tested: **22CZ2-29VHE-UNV-L935-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P388249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29VHE-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2600.2 lumens
Efficiency: N/A
Efficacy: 119.8 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

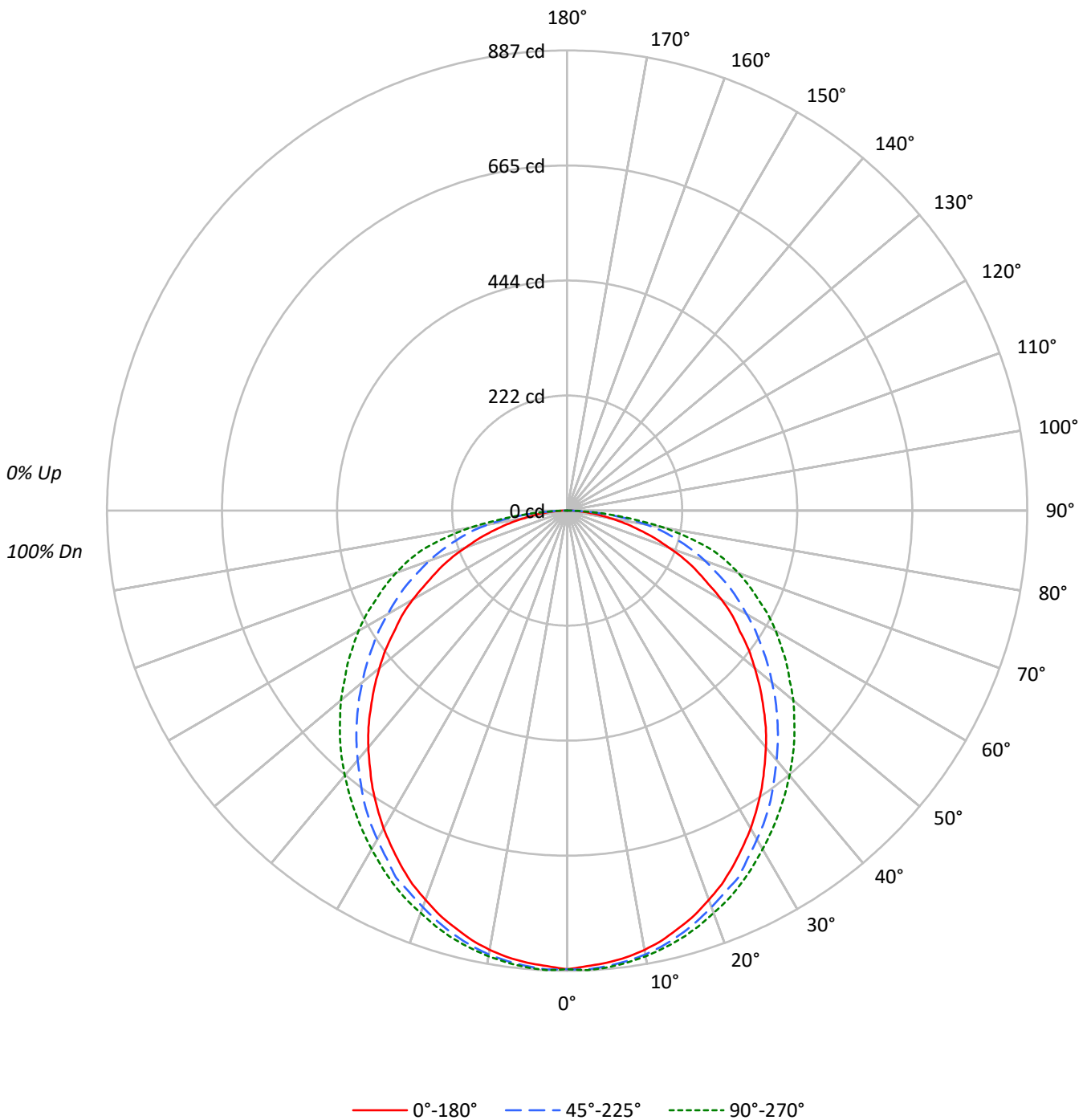
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2379	2379	2379
5°	2364	2381	2388
10°	2349	2374	2384
15°	2320	2356	2377
20°	2286	2330	2363
25°	2245	2317	2355
30°	2198	2274	2342
35°	2148	2244	2337
40°	2094	2207	2342
45°	2035	2181	2357
50°	1976	2159	2384
55°	1909	2149	2425
60°	1852	2148	2499
65°	1760	2183	2591
70°	1641	2225	2758
75°	1503	2301	2980
80°	1308	2399	2935
85°	1145	2133	2331



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	3.2
10°-20°	238.2	9.2
20°-30°	357.5	13.7
30°-40°	427.2	16.4
40°-50°	444.2	17.1
50°-60°	411.7	15.8
60°-70°	337.7	13.0
70°-80°	228.3	8.8
80°-90°	71.7	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°	679.3	26.1
0°-40°	1106.5	42.6
0°-60°	1962.4	75.5
0°-90°	2600.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2600.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	875	876	882	883	884	83
15°	833	837	846	851	853	235
25°	756	763	780	789	793	348
35°	654	663	683	704	711	409
45°	535	545	573	606	619	413
55°	407	420	458	499	517	366
65°	276	292	343	388	407	273
75°	145	169	221	266	287	153
85°	37	51	69	77	76	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	884.1	884.1	884.1	884.1	884.1
2.5°	879.0	881.6	885.4	886.7	886.7
5°	875.2	876.4	881.6	882.8	884.1
7.5°	868.8	871.3	876.4	877.7	879.0
10°	859.8	862.4	868.8	871.3	872.6
12.5°	848.3	850.8	858.5	862.4	863.6
15°	832.9	836.8	845.7	850.8	853.4
17.5°	817.6	821.4	830.4	838.1	840.6
20°	798.4	807.3	813.7	824.0	825.3
22.5°	779.2	784.3	795.8	806.1	811.2
25°	756.2	762.6	780.5	789.4	793.3
27.5°	731.9	740.8	754.9	769.0	774.1
30°	707.5	713.9	731.9	748.5	753.6
32.5°	680.7	689.6	708.8	725.5	733.1
35°	653.8	662.8	683.2	703.7	711.4
37.5°	624.4	634.6	655.1	679.4	689.6
40°	596.2	603.9	628.2	657.6	666.6
42.5°	566.8	575.8	601.4	633.3	643.6
45°	534.8	545.1	573.2	606.5	619.3
47.5°	504.1	514.3	545.1	578.3	593.7
50°	472.1	484.9	515.6	554.0	569.4
52.5°	441.4	452.9	487.5	527.1	541.2
55°	406.9	419.7	458.1	499.0	516.9
57.5°	378.7	387.7	429.9	472.1	490.0
60°	344.2	355.7	399.2	444.0	464.4
62.5°	307.1	326.3	371.0	417.1	437.6
65°	276.4	291.7	342.9	387.7	406.9
67.5°	244.4	261.0	310.9	358.3	380.0
70°	208.6	230.3	282.8	330.1	350.6
72.5°	176.6	199.6	253.3	299.4	321.1
75°	144.6	168.9	221.3	266.1	286.6
77.5°	113.9	140.7	191.9	226.5	239.3
80°	84.4	110.0	154.8	179.1	189.4
82.5°	58.9	80.6	113.9	126.7	129.2
85°	37.1	51.2	69.1	76.8	75.5
87.5°	16.6	20.5	25.6	28.1	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)