

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: P388509

Luminaire Tested: **22CZ2-85VHE-UNV-L930-CD1-SDWPD1-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: P388509
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: 22CZ2-85VHE-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6935.2 lumens
Efficiency: N/A
Efficacy: 109.0 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

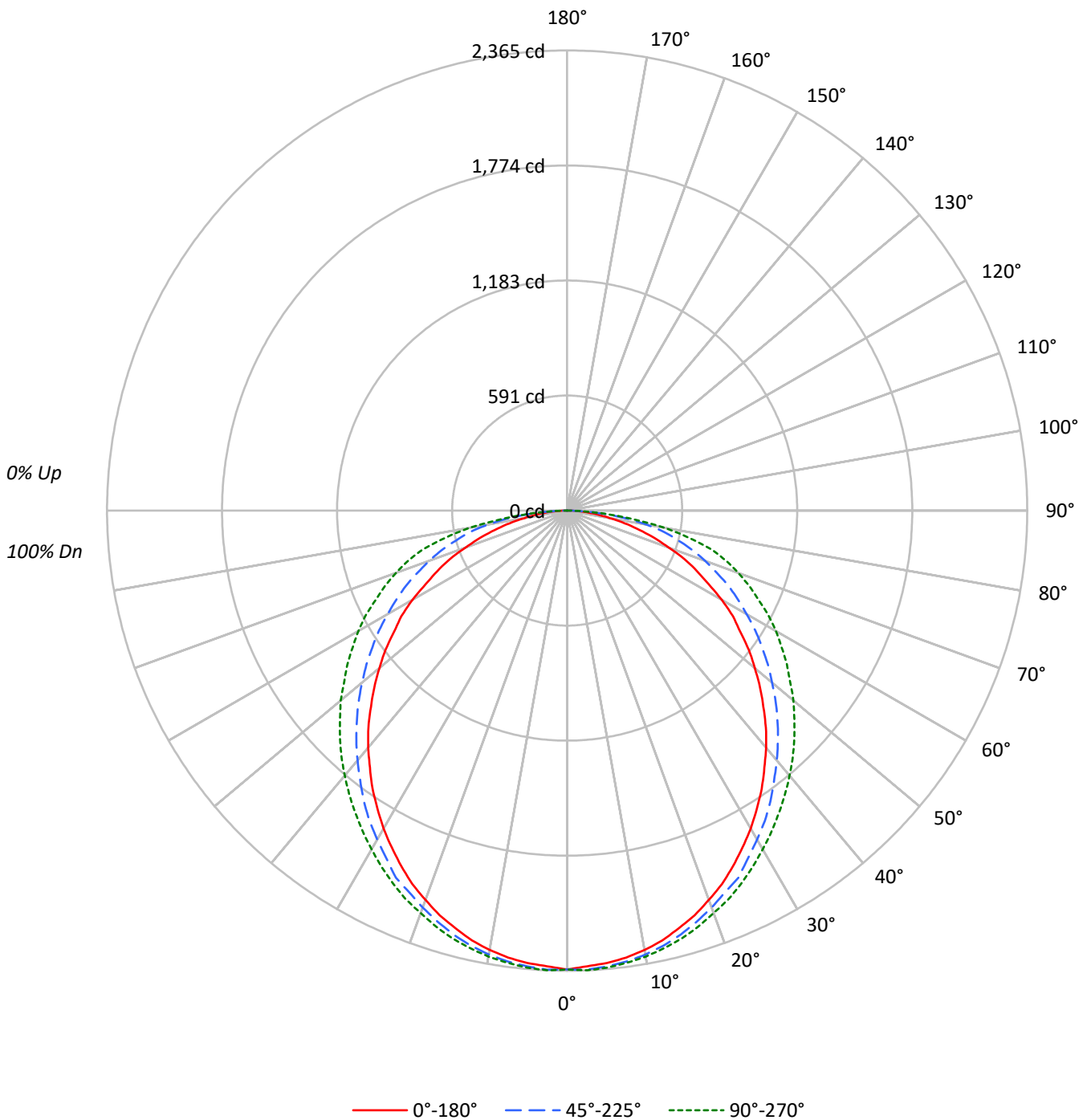
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6346	6346	6346
5°	6305	6351	6370
10°	6266	6331	6360
15°	6189	6284	6341
20°	6098	6215	6303
25°	5988	6181	6282
30°	5864	6065	6246
35°	5729	5986	6233
40°	5586	5886	6246
45°	5429	5818	6286
50°	5272	5758	6357
55°	5091	5732	6468
60°	4941	5730	6667
65°	4693	5824	6910
70°	4377	5934	7356
75°	4009	6138	7948
80°	3490	6399	7827
85°	3057	5690	6215



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.0	3.2
10°-20°	635.2	9.2
20°-30°	953.6	13.7
30°-40°	1139.4	16.4
40°-50°	1184.8	17.1
50°-60°	1098.2	15.8
60°-70°	900.8	13.0
70°-80°	608.9	8.8
80°-90°	191.3	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°	1811.8	26.1
0°-40°	2951.2	42.6
0°-60°	5234.2	75.5
0°-90°	6935.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6935.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2358	2358	2358	2358	2358	
5°	2334	2338	2351	2355	2358	222
15°	2222	2232	2256	2269	2276	627
25°	2017	2034	2082	2106	2116	929
35°	1744	1768	1822	1877	1897	1090
45°	1426	1454	1529	1618	1652	1102
55°	1085	1119	1222	1331	1379	975
65°	737	778	915	1034	1085	729
75°	386	450	590	710	764	409
85°	99	136	184	205	201	112
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2358.1	2358.1	2358.1	2358.1	2358.1
2.5°	2344.4	2351.3	2361.5	2364.9	2364.9
5°	2334.2	2337.6	2351.3	2354.7	2358.1
7.5°	2317.1	2324.0	2337.6	2341.0	2344.4
10°	2293.3	2300.1	2317.1	2324.0	2327.4
12.5°	2262.5	2269.4	2289.8	2300.1	2303.5
15°	2221.6	2231.8	2255.7	2269.4	2276.2
17.5°	2180.6	2190.9	2214.8	2235.2	2242.1
20°	2129.5	2153.3	2170.4	2197.7	2201.1
22.5°	2078.3	2091.9	2122.6	2149.9	2163.6
25°	2016.8	2033.9	2081.7	2105.6	2115.8
27.5°	1952.0	1975.9	2013.4	2051.0	2064.6
30°	1887.2	1904.2	1952.0	1996.4	2010.0
32.5°	1815.5	1839.4	1890.6	1934.9	1955.4
35°	1743.8	1767.7	1822.3	1876.9	1897.4
37.5°	1665.3	1692.6	1747.2	1812.1	1839.4
40°	1590.3	1610.7	1675.6	1754.1	1778.0
42.5°	1511.8	1535.7	1603.9	1689.2	1716.5
45°	1426.5	1453.8	1528.8	1617.6	1651.7
47.5°	1344.6	1371.9	1453.8	1542.5	1583.4
50°	1259.2	1293.4	1375.3	1477.6	1518.6
52.5°	1177.3	1208.1	1300.2	1406.0	1443.5
55°	1085.2	1119.3	1221.7	1330.9	1378.7
57.5°	1010.1	1034.0	1146.6	1259.2	1307.0
60°	918.0	948.7	1064.7	1184.2	1238.8
62.5°	819.0	870.2	989.6	1112.5	1167.1
65°	737.1	778.1	914.6	1034.0	1085.2
67.5°	651.8	696.2	829.3	955.5	1013.5
70°	556.3	614.3	754.2	880.4	935.0
72.5°	470.9	532.4	675.7	798.5	856.6
75°	385.6	450.5	590.4	709.8	764.4
77.5°	303.7	375.4	511.9	604.0	638.2
80°	225.2	293.5	412.9	477.8	505.1
82.5°	157.0	215.0	303.7	337.8	344.7
85°	99.0	136.5	184.3	204.8	201.3
87.5°	44.4	54.6	68.3	75.1	71.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)