

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: P389397

Luminaire Tested: **22CZ2-75VHE-S-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: P389397  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-75VHE-S-UNV-L930-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6392.1 lumens  
Efficiency: N/A  
Efficacy: 116.9 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

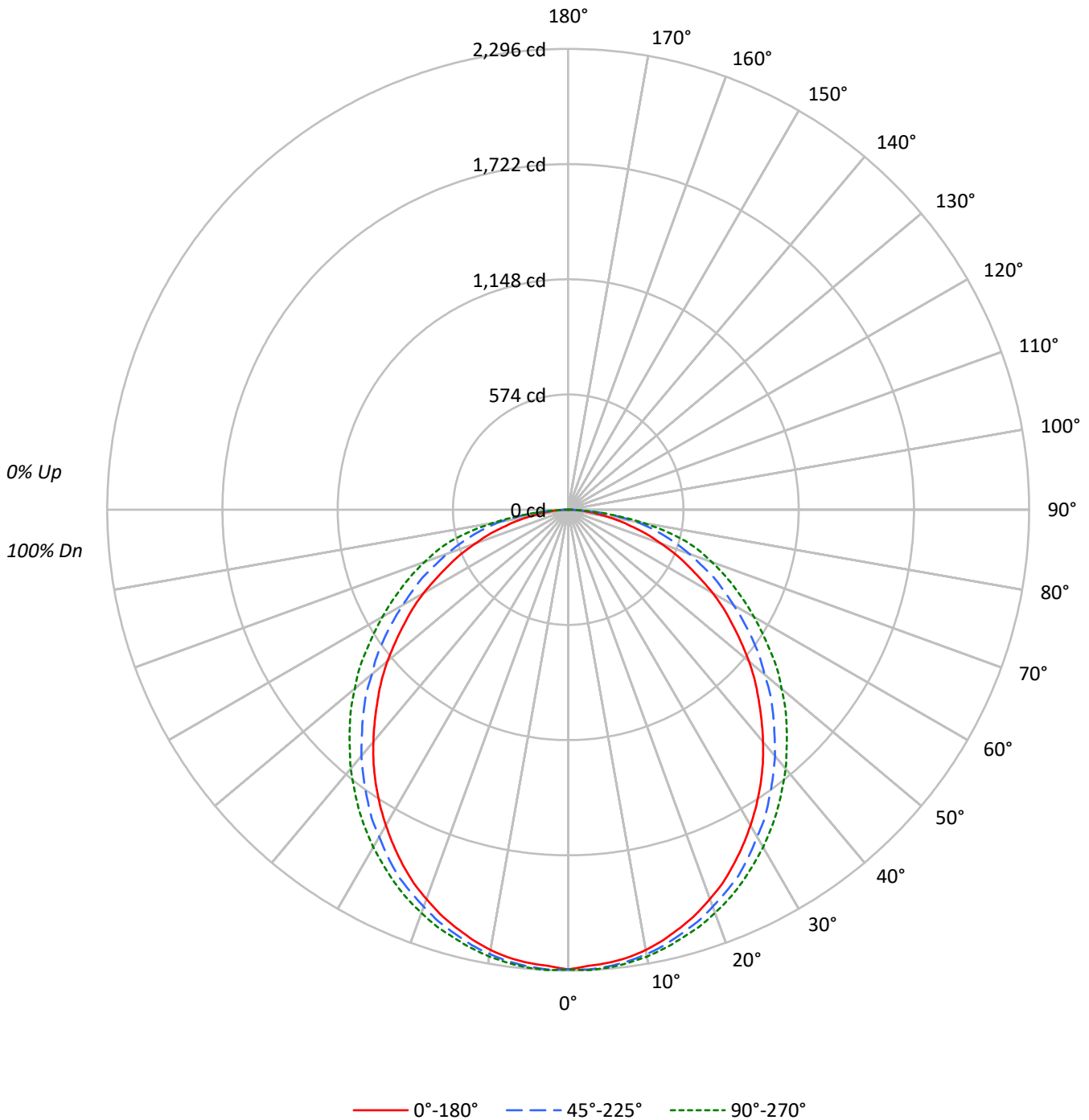
Input Watts (W): 54.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6164	6164	6164
5°	6123	6171	6187
10°	6088	6145	6177
15°	6007	6090	6148
20°	5910	6030	6124
25°	5791	5968	6084
30°	5644	5848	6033
35°	5486	5741	5977
40°	5301	5626	5919
45°	5108	5493	5856
50°	4919	5344	5806
55°	4687	5247	5765
60°	4478	5120	5746
65°	4178	5089	5811
70°	3848	5045	5984
75°	3473	5116	6294
80°	3005	5269	5915
85°	2485	4421	4421



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.6	3.4
10°-20°	616.4	9.6
20°-30°	922.3	14.4
30°-40°	1092.3	17.1
40°-50°	1113.2	17.4
50°-60°	997.7	15.6
60°-70°	781.1	12.2
70°-80°	503.7	7.9
80°-90°	148.8	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°	1755.4	27.5
0°-40°	2847.6	44.5
0°-60°	4958.5	77.6
0°-90°	6392.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6392.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2290	2290	2290	2290	2290	
5°	2267	2273	2284	2288	2290	215
15°	2156	2168	2186	2204	2207	608
25°	1950	1968	2010	2037	2049	898
35°	1670	1691	1748	1801	1819	1044
45°	1342	1372	1444	1518	1539	1036
55°	999	1032	1118	1196	1229	896
65°	656	695	799	877	913	652
75°	334	385	492	576	605	358
85°	80	110	143	143	143	95
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2290.5	2290.5	2290.5	2290.5	2290.5
2.5°	2275.6	2281.5	2293.5	2296.5	2296.5
5°	2266.6	2272.6	2284.5	2287.5	2290.5
7.5°	2251.7	2254.7	2269.6	2275.6	2278.6
10°	2227.9	2233.8	2248.7	2257.7	2260.7
12.5°	2195.1	2204.0	2221.9	2233.8	2236.8
15°	2156.3	2168.2	2186.1	2204.0	2207.0
17.5°	2114.5	2126.5	2150.3	2171.2	2177.2
20°	2063.8	2078.7	2105.6	2129.4	2138.4
22.5°	2013.1	2025.1	2057.9	2087.7	2096.6
25°	1950.5	1968.4	2010.1	2037.0	2048.9
27.5°	1884.9	1905.8	1947.5	1983.3	1995.2
30°	1816.3	1837.2	1881.9	1926.6	1941.5
32.5°	1744.7	1768.6	1822.3	1867.0	1881.9
35°	1670.1	1691.0	1747.7	1801.4	1819.3
37.5°	1592.6	1610.5	1676.1	1732.8	1750.7
40°	1509.1	1533.0	1601.6	1667.2	1685.1
42.5°	1425.6	1452.4	1521.0	1592.6	1610.5
45°	1342.1	1371.9	1443.5	1518.0	1538.9
47.5°	1261.6	1285.4	1365.9	1437.5	1467.3
50°	1175.1	1198.9	1276.5	1357.0	1386.8
52.5°	1085.6	1118.4	1201.9	1279.5	1315.2
55°	999.1	1031.9	1118.4	1195.9	1228.8
57.5°	918.6	945.4	1034.9	1115.4	1148.2
60°	832.1	856.0	951.4	1037.9	1067.7
62.5°	739.6	775.4	873.8	954.4	990.2
65°	656.1	694.9	799.3	876.8	912.6
67.5°	578.6	614.4	715.8	799.3	838.1
70°	489.1	536.8	641.2	724.7	760.5
72.5°	417.5	459.3	566.7	650.2	688.9
75°	334.0	384.7	492.1	575.6	605.4
77.5°	265.4	316.1	417.5	483.1	498.1
80°	193.9	244.6	340.0	372.8	381.7
82.5°	131.2	178.9	244.6	253.5	256.5
85°	80.5	110.3	143.2	143.2	143.2
87.5°	38.8	44.7	50.7	47.7	47.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)