

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: P388470

Luminaire Tested: **22CZ2-75VHE-UNV-L950-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: P388470  
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: 22CZ2-75VHE-UNV-L950-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6685.4 lumens  
Efficiency: N/A  
Efficacy: 122.2 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

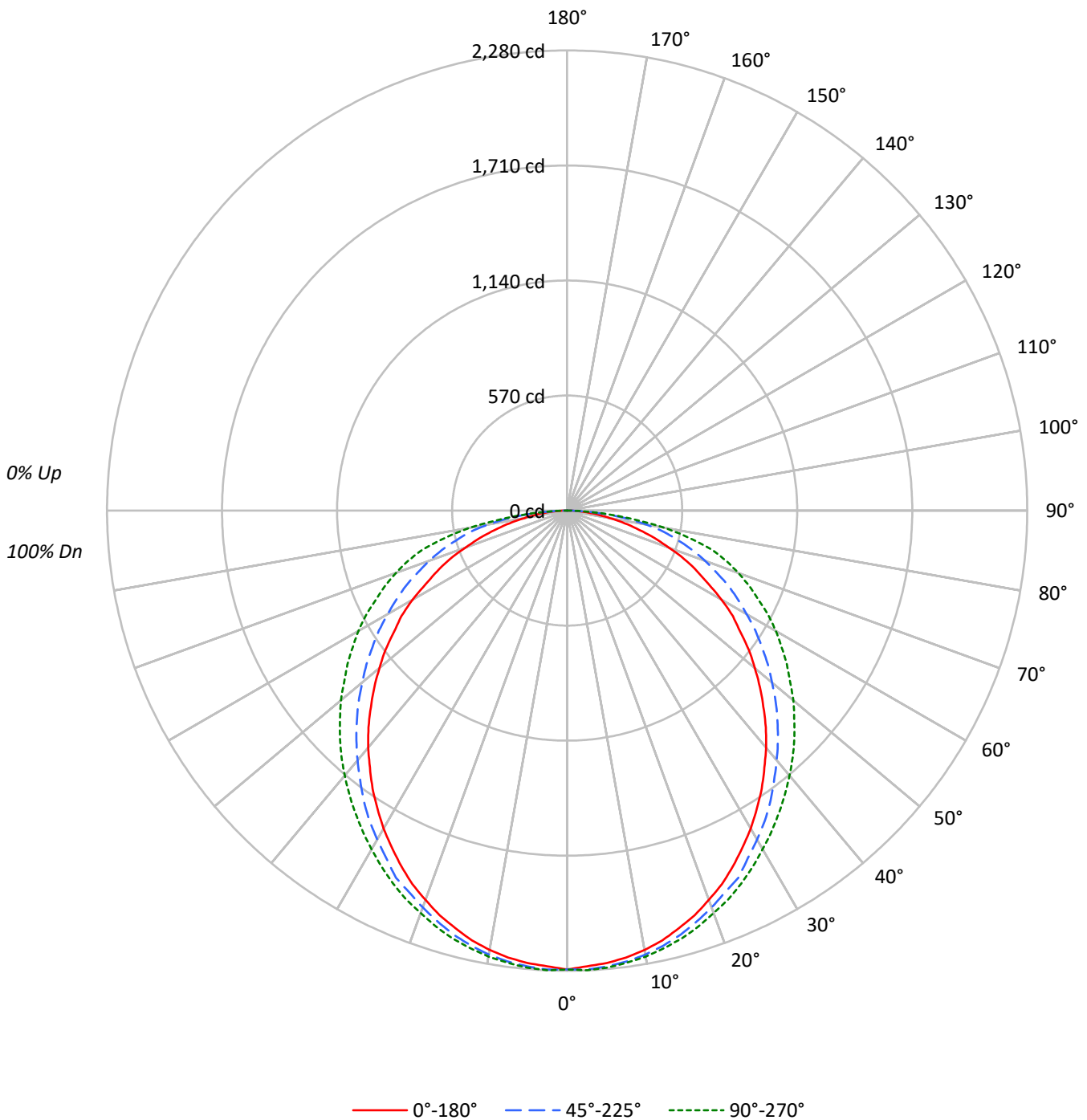
Input Watts (W): 54.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P388470

CATALOG NUMBER: 22CZ2-75VHE-UNV-L950-CD1-SDWPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P388470

CATALOG NUMBER: 22CZ2-75VHE-UNV-L950-CD1-SDWPD1-U

**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°	6117	6117	6117
5°	6078	6123	6140
10°	6041	6104	6131
15°	5966	6058	6113
20°	5879	5991	6076
25°	5773	5958	6056
30°	5653	5847	6021
35°	5522	5771	6009
40°	5385	5674	6021
45°	5233	5609	6059
50°	5082	5550	6128
55°	4908	5525	6235
60°	4762	5524	6427
65°	4525	5613	6661
70°	4219	5720	7092
75°	3865	5917	7662
80°	3364	6168	7545
85°	2946	5483	5993



TEST NUMBER: P388470

CATALOG NUMBER: 22CZ2-75VHE-UNV-L950-CD1-SDWPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.0	3.2
10°-20°	612.3	9.2
20°-30°	919.2	13.7
30°-40°	1098.4	16.4
40°-50°	1142.1	17.1
50°-60°	1058.6	15.8
60°-70°	868.3	13.0
70°-80°	587.0	8.8
80°-90°	184.4	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°	1746.5	26.1
0°-40°	2844.9	42.6
0°-60°	5045.6	75.5
0°-90°	6685.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6685.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2273	2273	2273	2273	2273	
5°	2250	2253	2267	2270	2273	214
15°	2142	2151	2174	2188	2194	604
25°	1944	1961	2007	2030	2040	895
35°	1681	1704	1757	1809	1829	1051
45°	1375	1401	1474	1559	1592	1062
55°	1046	1079	1178	1283	1329	940
65°	711	750	882	997	1046	702
75°	372	434	569	684	737	394
85°	95	132	178	197	194	108
90°	0	0	0	0	0	



TEST NUMBER: P388470

CATALOG NUMBER: 22CZ2-75VHE-UNV-L950-CD1-SDWPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2273.2	2273.2	2273.2	2273.2	2273.2
2.5°	2260.0	2266.6	2276.4	2279.7	2279.7
5°	2250.1	2253.4	2266.6	2269.9	2273.2
7.5°	2233.7	2240.3	2253.4	2256.7	2260.0
10°	2210.7	2217.2	2233.7	2240.3	2243.6
12.5°	2181.0	2187.6	2207.4	2217.2	2220.5
15°	2141.6	2151.4	2174.5	2187.6	2194.2
17.5°	2102.1	2112.0	2135.0	2154.7	2161.3
20°	2052.8	2075.8	2092.2	2118.5	2121.8
22.5°	2003.4	2016.6	2046.2	2072.5	2085.6
25°	1944.2	1960.6	2006.7	2029.7	2039.6
27.5°	1881.7	1904.7	1940.9	1977.1	1990.2
30°	1819.2	1835.6	1881.7	1924.5	1937.6
32.5°	1750.1	1773.1	1822.5	1865.2	1885.0
35°	1681.0	1704.0	1756.7	1809.3	1829.1
37.5°	1605.4	1631.7	1684.3	1746.8	1773.1
40°	1533.0	1552.7	1615.2	1690.9	1713.9
42.5°	1457.3	1480.3	1546.1	1628.4	1654.7
45°	1375.1	1401.4	1473.8	1559.3	1592.2
47.5°	1296.1	1322.4	1401.4	1486.9	1526.4
50°	1213.9	1246.8	1325.7	1424.4	1463.9
52.5°	1134.9	1164.5	1253.4	1355.3	1391.5
55°	1046.1	1079.0	1177.7	1283.0	1329.0
57.5°	973.7	996.8	1105.3	1213.9	1259.9
60°	884.9	914.5	1026.4	1141.5	1194.1
62.5°	789.5	838.9	954.0	1072.4	1125.1
65°	710.6	750.0	881.6	996.8	1046.1
67.5°	628.3	671.1	799.4	921.1	977.0
70°	536.2	592.1	727.0	848.7	901.4
72.5°	454.0	513.2	651.4	769.8	825.7
75°	371.7	434.2	569.1	684.3	736.9
77.5°	292.8	361.9	493.4	582.3	615.2
80°	217.1	282.9	398.0	460.6	486.9
82.5°	151.3	207.2	292.8	325.7	332.3
85°	95.4	131.6	177.6	197.4	194.1
87.5°	42.8	52.6	65.8	72.4	69.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)