

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: P388423

Luminaire Tested: **22CZ2-65VHE-UNV-L950-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: P388423  
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: 22CZ2-65VHE-UNV-L950-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

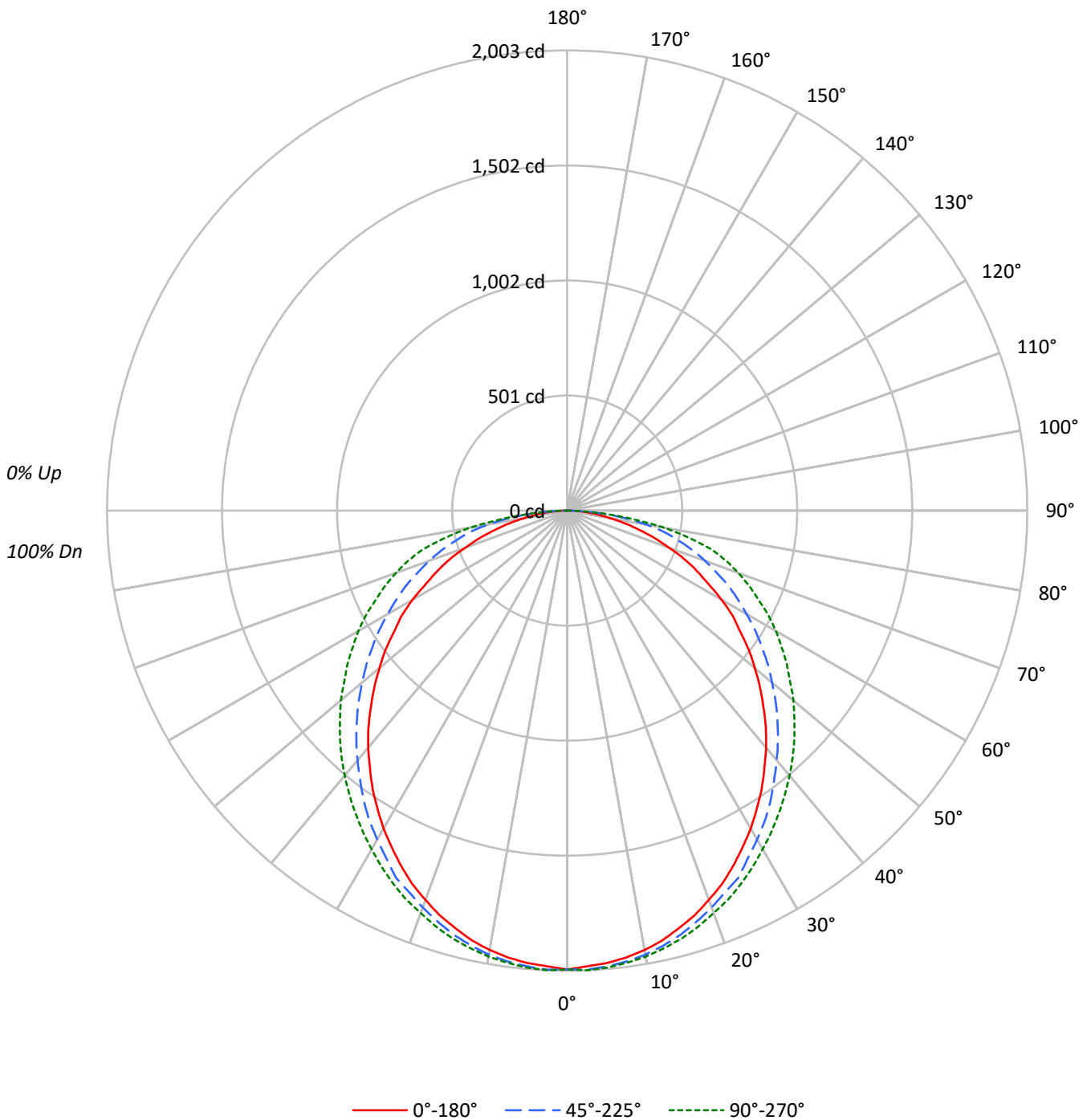
Lumens per Lamp: N/A  
Luminaire Lumens: 5873.3 lumens  
Efficiency: N/A  
Efficacy: 122.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 47.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	5374	5374	5374
5°	5340	5379	5394
10°	5307	5362	5386
15°	5241	5322	5370
20°	5164	5264	5338
25°	5071	5234	5320
30°	4966	5137	5289
35°	4851	5070	5279
40°	4731	4985	5289
45°	4597	4927	5323
50°	4464	4876	5384
55°	4312	4854	5478
60°	4184	4853	5646
65°	3975	4932	5852
70°	3707	5025	6231
75°	3396	5199	6731
80°	2955	5419	6628
85°	2587	4820	5264



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.9	3.2
10°-20°	537.9	9.2
20°-30°	807.6	13.7
30°-40°	965.0	16.4
40°-50°	1003.4	17.1
50°-60°	930.0	15.8
60°-70°	762.8	13.0
70°-80°	515.7	8.8
80°-90°	162.0	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°	1534.4	26.1
0°-40°	2499.3	42.6
0°-60°	4432.7	75.5
0°-90°	5873.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5873.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1997	1997	1997	1997	1997	
5°	1977	1980	1991	1994	1997	188
15°	1881	1890	1910	1922	1928	531
25°	1708	1722	1763	1783	1792	787
35°	1477	1497	1543	1590	1607	923
45°	1208	1231	1295	1370	1399	933
55°	919	948	1035	1127	1168	826
65°	624	659	774	876	919	617
75°	327	382	500	601	647	346
85°	84	116	156	173	170	95
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1997.0	1997.0	1997.0	1997.0	1997.0
2.5°	1985.5	1991.3	1999.9	2002.8	2002.8
5°	1976.8	1979.7	1991.3	1994.1	1997.0
7.5°	1962.3	1968.1	1979.7	1982.6	1985.5
10°	1942.1	1947.9	1962.3	1968.1	1971.0
12.5°	1916.1	1921.9	1939.2	1947.9	1950.8
15°	1881.4	1890.1	1910.3	1921.9	1927.7
17.5°	1846.7	1855.4	1875.6	1893.0	1898.8
20°	1803.4	1823.6	1838.1	1861.2	1864.1
22.5°	1760.0	1771.6	1797.6	1820.7	1832.3
25°	1708.0	1722.5	1762.9	1783.2	1791.8
27.5°	1653.1	1673.3	1705.1	1736.9	1748.5
30°	1598.2	1612.7	1653.1	1690.7	1702.2
32.5°	1537.5	1557.7	1601.1	1638.7	1656.0
35°	1476.8	1497.1	1543.3	1589.5	1606.9
37.5°	1410.3	1433.5	1479.7	1534.6	1557.7
40°	1346.8	1364.1	1419.0	1485.5	1505.7
42.5°	1280.3	1300.5	1358.3	1430.6	1453.7
45°	1208.0	1231.2	1294.7	1369.9	1398.8
47.5°	1138.7	1161.8	1231.2	1306.3	1341.0
50°	1066.4	1095.3	1164.7	1251.4	1286.1
52.5°	997.1	1023.1	1101.1	1190.7	1222.5
55°	919.0	947.9	1034.6	1127.1	1167.6
57.5°	855.5	875.7	971.1	1066.4	1106.9
60°	777.4	803.4	901.7	1002.9	1049.1
62.5°	693.6	737.0	838.1	942.2	988.4
65°	624.3	658.9	774.5	875.7	919.0
67.5°	552.0	589.6	702.3	809.2	858.3
70°	471.1	520.2	638.7	745.6	791.9
72.5°	398.8	450.8	572.2	676.3	725.4
75°	326.6	381.5	500.0	601.1	647.4
77.5°	257.2	317.9	433.5	511.5	540.4
80°	190.7	248.5	349.7	404.6	427.7
82.5°	132.9	182.1	257.2	286.1	291.9
85°	83.8	115.6	156.1	173.4	170.5
87.5°	37.6	46.2	57.8	63.6	60.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)