

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: P391735

Luminaire Tested: **24CZ2-80VHE-RDP-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: P391735
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-80VHE-RDP-UNV-L950-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4895.1 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

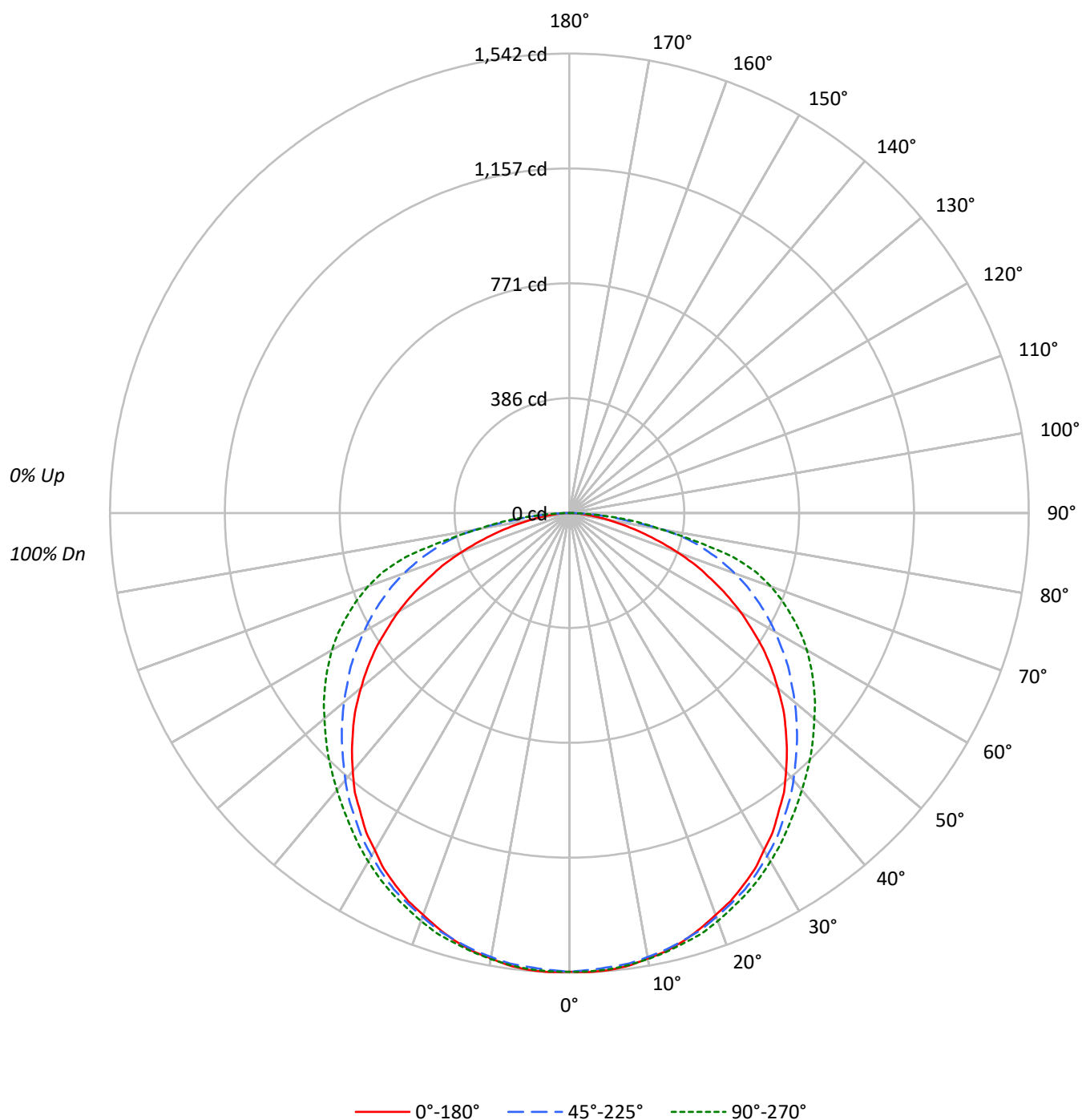
Input Watts (W): 53.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2071	2071	2071
5°	2079	2066	2076
10°	2073	2067	2077
15°	2070	2066	2080
20°	2055	2065	2086
25°	2047	2069	2091
30°	2030	2063	2097
35°	2010	2058	2106
40°	1987	2056	2132
45°	1954	2056	2181
50°	1911	2069	2246
55°	1863	2102	2346
60°	1784	2143	2476
65°	1670	2218	2628
70°	1519	2321	2827
75°	1288	2449	2954
80°	1016	2465	2390
85°	750	1874	2100



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	3.0
10°-20°	420.3	8.6
20°-30°	642.7	13.1
30°-40°	785.6	16.0
40°-50°	837.3	17.1
50°-60°	800.6	16.4
60°-70°	678.2	13.9
70°-80°	455.8	9.3
80°-90°	128.6	2.6
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°	1208.9	24.7
0°-40°	1994.6	40.7
0°-60°	3632.5	74.2
0°-90°	4895.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4895.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1539	1537	1530	1537	1537	146
15°	1486	1486	1484	1496	1493	419
25°	1379	1384	1394	1406	1408	636
35°	1224	1233	1253	1277	1282	767
45°	1027	1044	1080	1127	1146	792
55°	794	823	896	966	1000	707
65°	524	578	697	789	826	521
75°	248	338	471	551	568	265
85°	49	100	121	131	136	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1539.4	1539.4	1539.4	1539.4	1539.4
2.5°	1541.8	1541.8	1534.5	1539.4	1539.4
5°	1539.4	1536.9	1529.7	1536.9	1536.9
7.5°	1532.1	1529.7	1524.8	1532.1	1529.7
10°	1517.5	1517.5	1512.7	1519.9	1519.9
12.5°	1505.4	1502.9	1500.5	1510.2	1507.8
15°	1486.0	1486.0	1483.5	1495.7	1493.2
17.5°	1461.7	1464.1	1466.5	1476.2	1478.7
20°	1435.0	1439.8	1442.2	1456.8	1456.8
22.5°	1410.7	1413.1	1418.0	1432.5	1432.5
25°	1379.1	1384.0	1393.7	1405.8	1408.3
27.5°	1347.6	1350.0	1362.1	1379.1	1381.5
30°	1306.3	1313.6	1328.1	1347.6	1350.0
32.5°	1269.9	1277.1	1294.1	1313.6	1318.4
35°	1223.7	1233.4	1252.9	1277.1	1282.0
37.5°	1182.4	1189.7	1214.0	1240.7	1248.0
40°	1131.5	1146.0	1170.3	1201.9	1214.0
42.5°	1080.5	1095.0	1124.2	1165.5	1180.0
45°	1027.1	1044.1	1080.5	1126.6	1146.0
47.5°	973.6	993.1	1034.3	1087.8	1109.6
50°	912.9	937.2	988.2	1048.9	1073.2
52.5°	854.7	883.8	939.6	1007.6	1039.2
55°	794.0	823.1	895.9	966.4	1000.3
57.5°	726.0	764.8	845.0	925.1	961.5
60°	662.9	699.3	796.4	883.8	920.2
62.5°	594.9	643.4	747.8	840.1	876.5
65°	524.5	577.9	696.8	789.1	825.5
67.5°	461.3	519.6	645.9	738.1	774.5
70°	386.1	458.9	590.0	682.3	718.7
72.5°	315.6	395.8	531.7	621.6	655.6
75°	247.7	337.5	471.0	551.2	568.2
77.5°	184.5	279.2	407.9	441.9	429.8
80°	131.1	223.4	318.1	301.1	308.4
82.5°	85.0	170.0	196.7	223.4	230.7
85°	48.6	99.5	121.4	131.1	136.0
87.5°	21.9	36.4	48.6	48.6	46.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)