

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: P391687

Luminaire Tested: **24CZ2-75VHE-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: P391687
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: 24CZ2-75VHE-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: 4614.4 lumens
Efficiency: N/A
Efficacy: 92.5 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

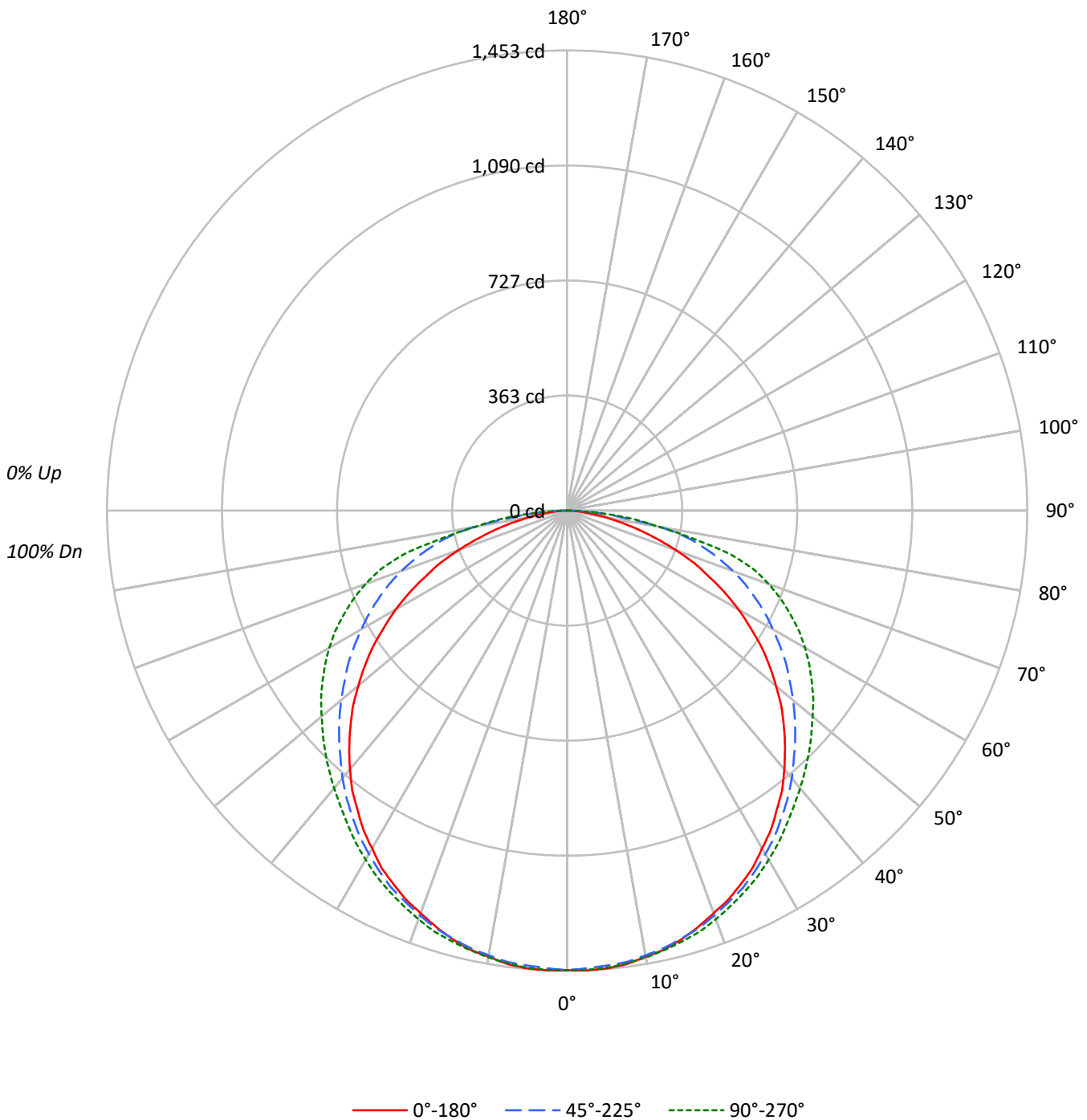
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1952	1952	1952
5°	1960	1947	1957
10°	1954	1948	1958
15°	1951	1948	1961
20°	1937	1947	1966
25°	1930	1950	1971
30°	1913	1945	1977
35°	1895	1940	1985
40°	1873	1938	2010
45°	1842	1938	2056
50°	1801	1950	2117
55°	1756	1981	2212
60°	1681	2020	2334
65°	1574	2091	2478
70°	1432	2188	2665
75°	1214	2308	2784
80°	958	2323	2252
85°	707	1766	1979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	3.0
10°-20°	396.2	8.6
20°-30°	605.8	13.1
30°-40°	740.6	16.0
40°-50°	789.3	17.1
50°-60°	754.7	16.4
60°-70°	639.3	13.9
70°-80°	429.7	9.3
80°-90°	121.2	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°	1139.6	24.7
0°-40°	1880.2	40.7
0°-60°	3424.2	74.2
0°-90°	4614.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4614.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1451	1449	1442	1449	1449	138
15°	1401	1401	1398	1410	1408	395
25°	1300	1305	1314	1325	1328	599
35°	1154	1163	1181	1204	1208	723
45°	968	984	1018	1062	1080	747
55°	748	776	845	911	943	667
65°	494	545	657	744	778	491
75°	234	318	444	520	536	250
85°	46	94	114	124	128	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1451.1	1451.1	1451.1	1451.1	1451.1
2.5°	1453.4	1453.4	1446.5	1451.1	1451.1
5°	1451.1	1448.8	1441.9	1448.8	1448.8
7.5°	1444.2	1441.9	1437.4	1444.2	1441.9
10°	1430.5	1430.5	1425.9	1432.8	1432.8
12.5°	1419.1	1416.8	1414.5	1423.6	1421.3
15°	1400.7	1400.7	1398.5	1409.9	1407.6
17.5°	1377.9	1380.1	1382.4	1391.6	1393.9
20°	1352.7	1357.3	1359.5	1373.3	1373.3
22.5°	1329.8	1332.1	1336.7	1350.4	1350.4
25°	1300.0	1304.6	1313.8	1325.2	1327.5
27.5°	1270.3	1272.6	1284.0	1300.0	1302.3
30°	1231.4	1238.2	1252.0	1270.3	1272.6
32.5°	1197.0	1203.9	1219.9	1238.2	1242.8
35°	1153.6	1162.7	1181.0	1203.9	1208.5
37.5°	1114.6	1121.5	1144.4	1169.6	1176.4
40°	1066.6	1080.3	1103.2	1133.0	1144.4
42.5°	1018.5	1032.2	1059.7	1098.6	1112.4
45°	968.2	984.2	1018.5	1062.0	1080.3
47.5°	917.8	936.1	975.0	1025.4	1046.0
50°	860.6	883.5	931.5	988.8	1011.6
52.5°	805.7	833.1	885.8	949.9	979.6
55°	748.4	775.9	844.6	910.9	943.0
57.5°	684.4	721.0	796.5	872.0	906.4
60°	624.8	659.2	750.7	833.1	867.5
62.5°	560.8	606.5	704.9	791.9	826.3
65°	494.4	544.7	656.9	743.9	778.2
67.5°	434.9	489.8	608.8	695.8	730.1
70°	363.9	432.6	556.2	643.2	677.5
72.5°	297.5	373.1	501.2	585.9	618.0
75°	233.5	318.1	444.0	519.6	535.6
77.5°	173.9	263.2	384.5	416.6	405.1
80°	123.6	210.6	299.8	283.8	290.7
82.5°	80.1	160.2	185.4	210.6	217.4
85°	45.8	93.8	114.4	123.6	128.2
87.5°	20.6	34.3	45.8	45.8	43.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)