

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: P391730

Luminaire Tested: **24CZ2-80VHE-RDP-UNV-L935-CD1-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: P391730
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-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4621.9 lumens
Efficiency: N/A
Efficacy: 85.9 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

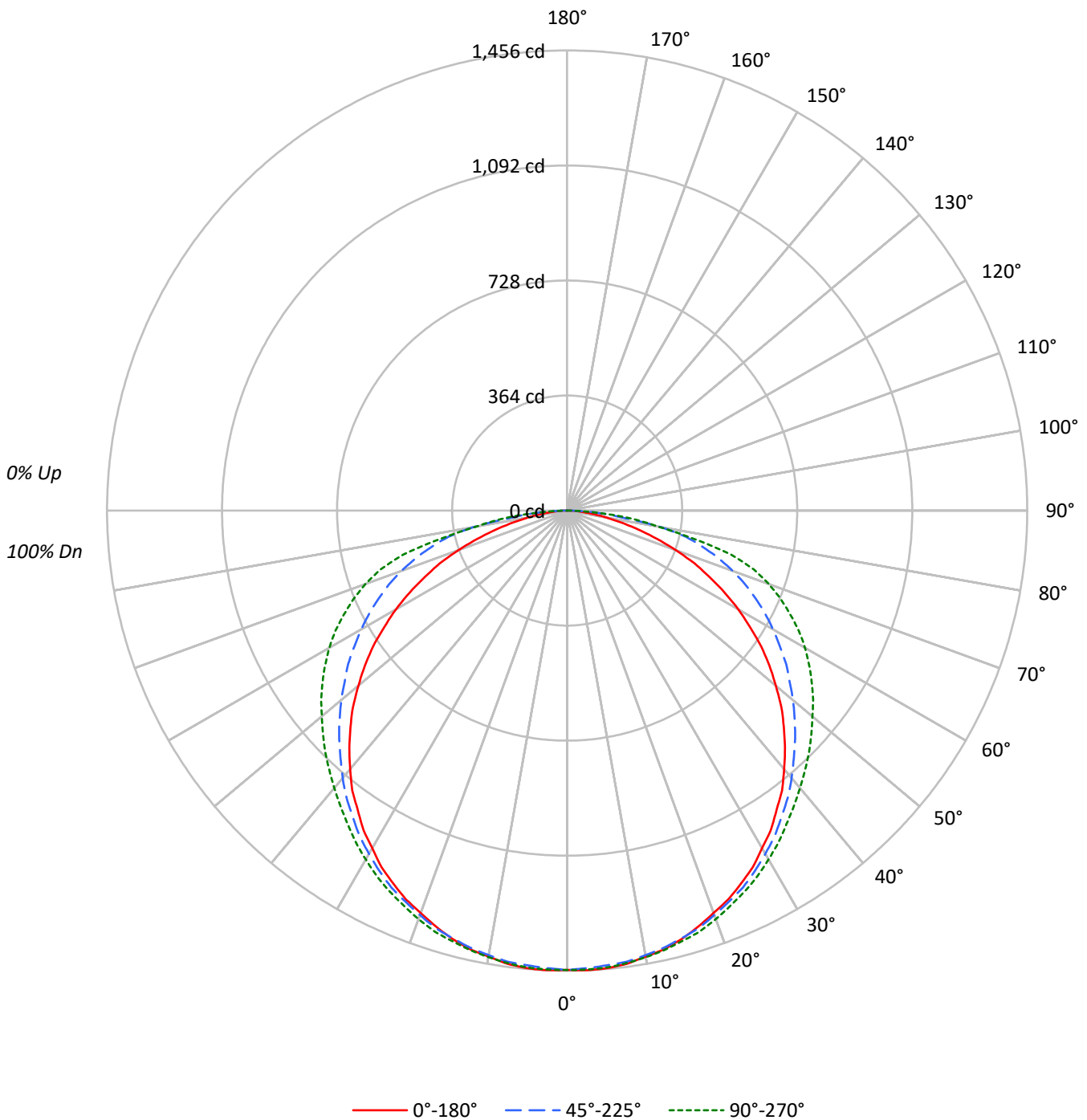
Input Watts (W): 53.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	1956	1956	1956
5°	1963	1951	1960
10°	1958	1951	1961
15°	1954	1951	1964
20°	1940	1950	1969
25°	1933	1954	1974
30°	1916	1948	1980
35°	1898	1943	1988
40°	1876	1941	2013
45°	1845	1941	2059
50°	1804	1953	2121
55°	1759	1984	2216
60°	1684	2023	2338
65°	1577	2095	2482
70°	1434	2192	2670
75°	1215	2312	2789
80°	959	2327	2256
85°	709	1769	1982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.9	3.0
10°-20°	396.8	8.6
20°-30°	606.8	13.1
30°-40°	741.8	16.0
40°-50°	790.6	17.1
50°-60°	755.9	16.4
60°-70°	640.4	13.9
70°-80°	430.4	9.3
80°-90°	121.4	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°	1141.5	24.7
0°-40°	1883.3	40.7
0°-60°	3429.8	74.2
0°-90°	4621.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4621.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1454	1451	1444	1451	1451	138
15°	1403	1403	1401	1412	1410	396
25°	1302	1307	1316	1327	1330	600
35°	1155	1165	1183	1206	1210	724
45°	970	986	1020	1064	1082	748
55°	750	777	846	912	944	668
65°	495	546	658	745	780	492
75°	234	319	445	520	536	250
85°	46	94	115	124	128	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1453.5	1453.5	1453.5	1453.5	1453.5
2.5°	1455.7	1455.7	1448.9	1453.5	1453.5
5°	1453.5	1451.2	1444.3	1451.2	1451.2
7.5°	1446.6	1444.3	1439.7	1446.6	1444.3
10°	1432.8	1432.8	1428.2	1435.1	1435.1
12.5°	1421.4	1419.1	1416.8	1425.9	1423.7
15°	1403.0	1403.0	1400.7	1412.2	1409.9
17.5°	1380.1	1382.4	1384.7	1393.9	1396.1
20°	1354.9	1359.5	1361.8	1375.5	1375.5
22.5°	1332.0	1334.2	1338.8	1352.6	1352.6
25°	1302.1	1306.7	1315.9	1327.4	1329.7
27.5°	1272.3	1274.6	1286.1	1302.1	1304.4
30°	1233.4	1240.3	1254.0	1272.3	1274.6
32.5°	1199.0	1205.9	1221.9	1240.3	1244.8
35°	1155.4	1164.6	1182.9	1205.9	1210.4
37.5°	1116.5	1123.3	1146.3	1171.5	1178.4
40°	1068.3	1082.1	1105.0	1134.8	1146.3
42.5°	1020.2	1033.9	1061.4	1100.4	1114.2
45°	969.7	985.8	1020.2	1063.7	1082.1
47.5°	919.3	937.6	976.6	1027.0	1047.7
50°	862.0	884.9	933.1	990.4	1013.3
52.5°	807.0	834.5	887.2	951.4	981.2
55°	749.7	777.2	845.9	912.4	944.5
57.5°	685.5	722.1	797.8	873.4	907.8
60°	625.9	660.2	751.9	834.5	868.9
62.5°	561.7	607.5	706.1	793.2	827.6
65°	495.2	545.6	658.0	745.1	779.5
67.5°	435.6	490.6	609.8	696.9	731.3
70°	364.5	433.3	557.1	644.2	678.6
72.5°	298.0	373.7	502.1	586.9	619.0
75°	233.8	318.7	444.7	520.4	536.4
77.5°	174.2	263.6	385.1	417.2	405.8
80°	123.8	210.9	300.3	284.3	291.1
82.5°	80.2	160.5	185.7	210.9	217.8
85°	45.9	94.0	114.6	123.8	128.4
87.5°	20.6	34.4	45.9	45.9	43.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)