

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: P391586

Luminaire Tested: **24CZ2-65VHE-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: P391586
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: 24CZ2-65VHE-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: 3733.1 lumens
Efficiency: N/A
Efficacy: 88.5 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

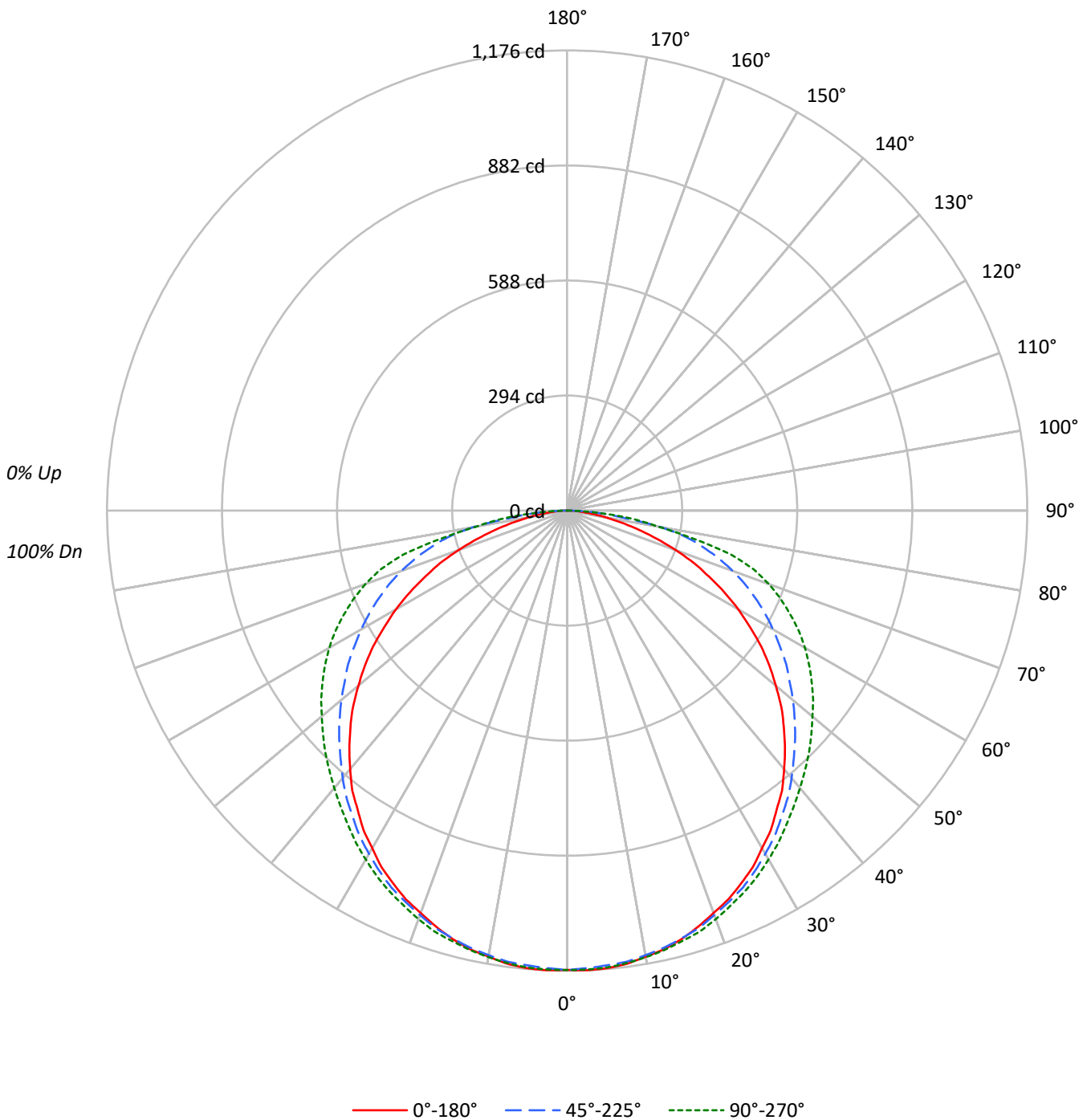
Input Watts (W): 42.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1580	1580	1580
5°	1586	1576	1583
10°	1581	1576	1584
15°	1578	1576	1586
20°	1567	1575	1591
25°	1561	1578	1594
30°	1548	1574	1599
35°	1533	1569	1606
40°	1516	1568	1626
45°	1490	1568	1663
50°	1457	1577	1713
55°	1420	1603	1790
60°	1360	1634	1889
65°	1273	1692	2004
70°	1158	1770	2156
75°	982	1867	2253
80°	775	1880	1822
85°	571	1430	1601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.4	3.0
10°-20°	320.5	8.6
20°-30°	490.1	13.1
30°-40°	599.1	16.0
40°-50°	638.6	17.1
50°-60°	610.6	16.4
60°-70°	517.2	13.9
70°-80°	347.6	9.3
80°-90°	98.1	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°	922.0	24.7
0°-40°	1521.1	40.7
0°-60°	2770.2	74.2
0°-90°	3733.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3733.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1174	1174	1174	1174	1174	
5°	1174	1172	1166	1172	1172	112
15°	1133	1133	1131	1141	1139	320
25°	1052	1055	1063	1072	1074	485
35°	933	941	956	974	978	585
45°	783	796	824	859	874	604
55°	606	628	683	737	763	539
65°	400	441	531	602	630	397
75°	189	257	359	420	433	202
85°	37	76	93	100	104	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1174.0	1174.0	1174.0	1174.0	1174.0
2.5°	1175.8	1175.8	1170.3	1174.0	1174.0
5°	1174.0	1172.1	1166.5	1172.1	1172.1
7.5°	1168.4	1166.5	1162.8	1168.4	1166.5
10°	1157.3	1157.3	1153.6	1159.1	1159.1
12.5°	1148.0	1146.2	1144.3	1151.7	1149.9
15°	1133.2	1133.2	1131.4	1140.6	1138.8
17.5°	1114.7	1116.6	1118.4	1125.8	1127.7
20°	1094.3	1098.0	1099.9	1111.0	1111.0
22.5°	1075.8	1077.7	1081.4	1092.5	1092.5
25°	1051.7	1055.4	1062.9	1072.1	1074.0
27.5°	1027.7	1029.5	1038.8	1051.7	1053.6
30°	996.2	1001.7	1012.9	1027.7	1029.5
32.5°	968.4	974.0	986.9	1001.7	1005.5
35°	933.2	940.6	955.5	974.0	977.7
37.5°	901.8	907.3	925.8	946.2	951.8
40°	862.9	874.0	892.5	916.6	925.8
42.5°	824.0	835.1	857.3	888.8	899.9
45°	783.3	796.2	824.0	859.2	874.0
47.5°	742.5	757.3	788.8	829.5	846.2
50°	696.2	714.7	753.6	799.9	818.4
52.5°	651.8	674.0	716.6	768.4	792.5
55°	605.5	627.7	683.3	737.0	762.9
57.5°	553.6	583.3	644.4	705.5	733.3
60°	505.5	533.3	607.3	674.0	701.8
62.5°	453.7	490.7	570.3	640.7	668.4
65°	400.0	440.7	531.4	601.8	629.6
67.5°	351.8	396.3	492.5	562.9	590.7
70°	294.4	350.0	450.0	520.3	548.1
72.5°	240.7	301.8	405.5	474.0	499.9
75°	188.9	257.4	359.2	420.3	433.3
77.5°	140.7	212.9	311.1	337.0	327.7
80°	100.0	170.4	242.6	229.6	235.2
82.5°	64.8	129.6	150.0	170.4	175.9
85°	37.0	75.9	92.6	100.0	103.7
87.5°	16.7	27.8	37.0	37.0	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)