

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: P230490

Luminaire Tested: **24CZ-LD5-65-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230490
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-65-RDP-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3822.6 lumens
Efficiency: N/A
Efficacy: 66.3 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

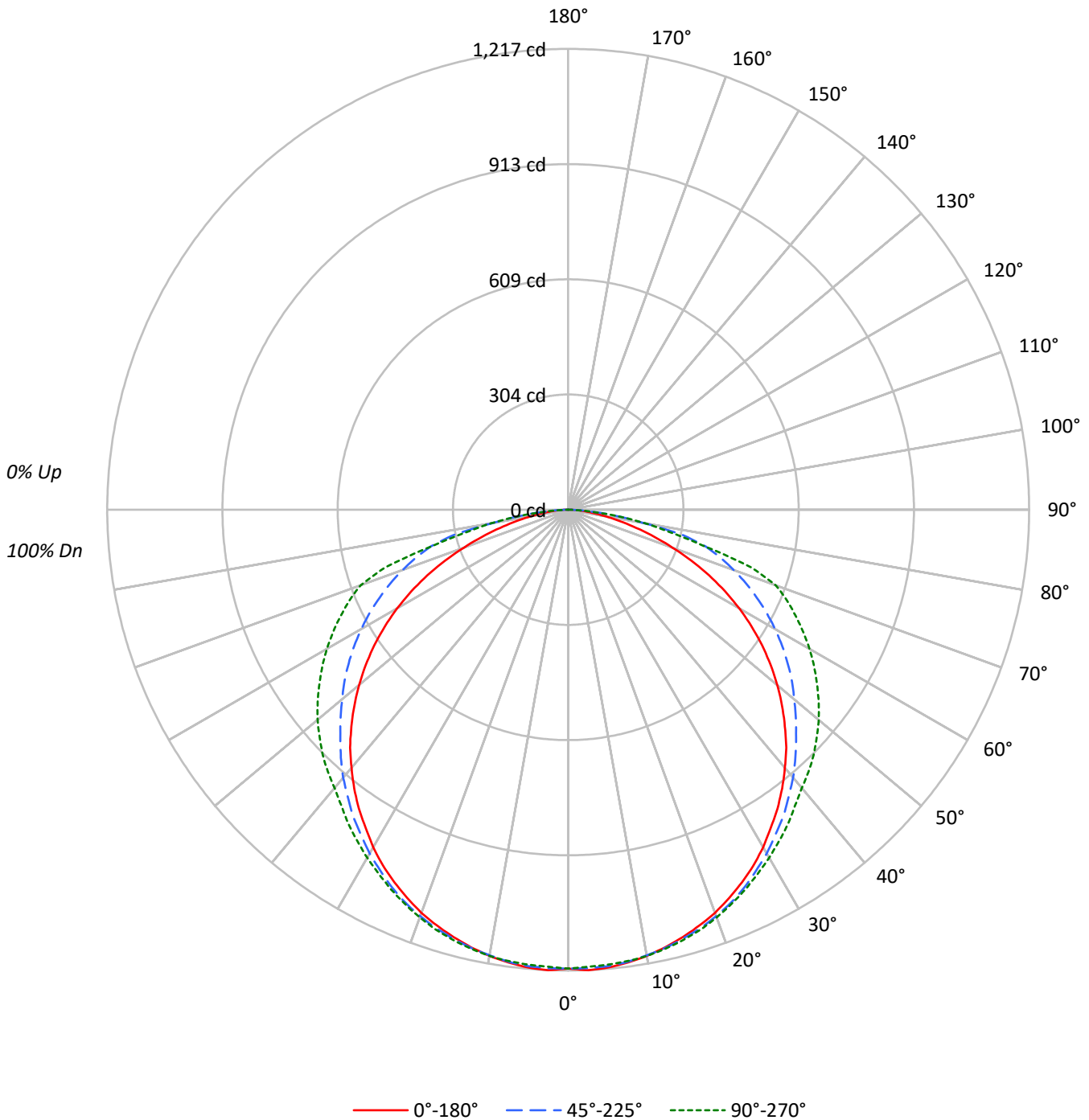
Input Watts (W): 57.64
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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	101	97	93	96	93	90	92	90	87	89	87	84
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1630	1630	1630
5°	1639	1634	1629
10°	1635	1633	1635
15°	1628	1633	1638
20°	1622	1635	1641
25°	1612	1634	1643
30°	1599	1628	1649
35°	1582	1626	1663
40°	1563	1623	1686
45°	1540	1618	1744
50°	1509	1631	1808
55°	1465	1660	1880
60°	1403	1696	1980
65°	1306	1749	2109
70°	1155	1828	2295
75°	968	1956	1927
80°	773	1546	1604
85°	610	1045	959



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.9	3.0
10°-20°	330.8	8.7
20°-30°	505.2	13.2
30°-40°	617.7	16.2
40°-50°	661.2	17.3
50°-60°	634.2	16.6
60°-70°	535.5	14.0
70°-80°	342.2	9.0
80°-90°	80.9	2.1
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°	951.0	24.9
0°-40°	1568.6	41.0
0°-60°	2864.0	74.9
0°-90°	3822.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3822.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1212	1212	1212	1212	1212	
5°	1214	1206	1210	1208	1206	115
15°	1168	1165	1172	1176	1176	330
25°	1086	1084	1101	1104	1106	500
35°	963	971	990	1003	1012	602
45°	809	822	850	890	916	624
55°	625	645	708	772	802	557
65°	410	450	549	627	662	405
75°	186	265	376	384	371	201
85°	40	66	68	66	62	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1211.8	1211.8	1211.8	1211.8	1211.8
2.5°	1217.4	1209.9	1211.8	1211.8	1208.0
5°	1213.7	1206.1	1209.9	1208.0	1206.1
7.5°	1206.1	1200.5	1204.3	1204.3	1202.4
10°	1196.7	1191.1	1194.9	1196.7	1196.7
12.5°	1183.6	1179.8	1185.5	1185.5	1187.3
15°	1168.5	1164.8	1172.3	1176.0	1176.0
17.5°	1151.6	1149.7	1159.1	1161.0	1162.9
20°	1132.8	1130.9	1142.2	1142.2	1145.9
22.5°	1110.2	1108.3	1123.4	1123.4	1127.1
25°	1085.7	1083.8	1100.8	1104.5	1106.4
27.5°	1059.4	1057.5	1074.4	1080.1	1083.8
30°	1029.3	1029.3	1048.1	1055.6	1061.3
32.5°	995.4	1001.0	1018.0	1029.3	1036.8
35°	963.4	970.9	989.8	1002.9	1012.3
37.5°	927.7	935.2	955.9	972.8	984.1
40°	890.0	899.4	923.9	942.7	959.7
42.5°	852.4	861.8	888.1	916.4	939.0
45°	809.1	822.3	850.5	890.0	916.4
47.5°	765.8	779.0	814.8	863.7	890.0
50°	720.7	735.7	779.0	835.5	863.7
52.5°	673.6	690.6	745.1	805.4	833.6
55°	624.7	645.4	707.5	771.5	801.6
57.5°	573.9	596.5	669.9	737.6	769.6
60°	521.2	549.4	630.4	701.9	735.7
62.5°	466.7	500.5	590.8	664.2	700.0
65°	410.2	449.7	549.4	626.6	662.3
67.5°	351.9	404.6	508.1	589.0	624.7
70°	293.5	355.6	464.8	547.6	583.3
72.5°	239.0	310.5	421.5	498.6	506.2
75°	186.3	265.3	376.3	383.9	370.7
77.5°	139.2	220.2	310.5	276.6	274.7
80°	99.7	176.9	199.5	205.1	207.0
82.5°	65.9	133.6	129.8	133.6	131.7
85°	39.5	65.9	67.7	65.9	62.1
87.5°	18.8	24.5	18.8	16.9	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)