

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: P263184

Luminaire Tested: **24CZ-LD5-65-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263184
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-65-SQP-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3972.1 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

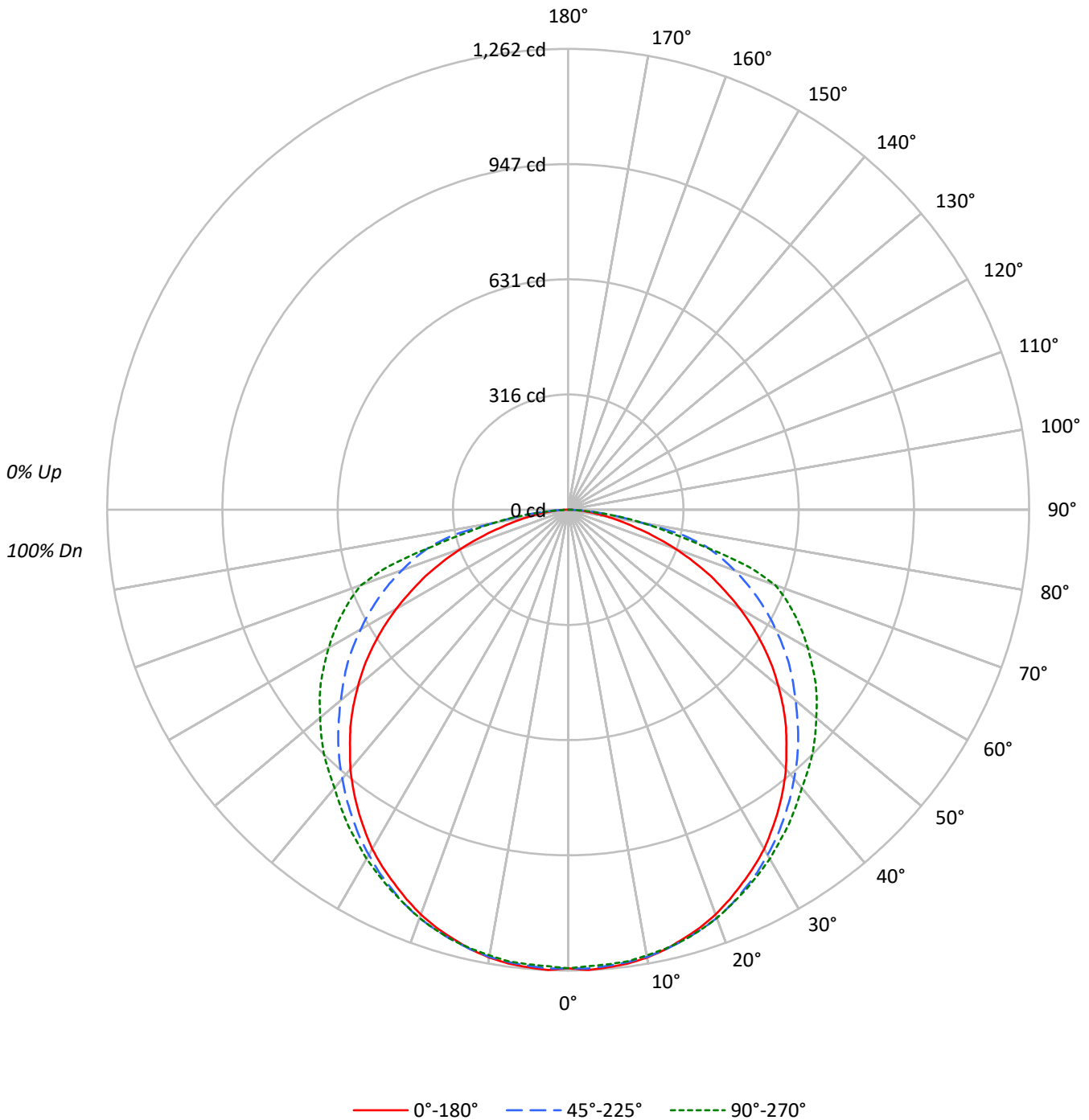
Input Watts (W): 50.189868
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1689	1689	1689
5°	1699	1693	1688
10°	1702	1699	1693
15°	1695	1701	1701
20°	1689	1704	1704
25°	1675	1700	1706
30°	1667	1696	1715
35°	1648	1692	1729
40°	1629	1690	1748
45°	1604	1694	1800
50°	1572	1701	1855
55°	1530	1733	1939
60°	1463	1767	2037
65°	1372	1822	2182
70°	1227	1905	2373
75°	1013	2037	1962
80°	827	1574	1590
85°	665	1045	982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.3	3.0
10°-20°	344.1	8.7
20°-30°	525.9	13.2
30°-40°	643.2	16.2
40°-50°	688.3	17.3
50°-60°	659.1	16.6
60°-70°	557.5	14.0
70°-80°	353.4	8.9
80°-90°	81.3	2.0
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°	989.3	24.9
0°-40°	1632.5	41.1
0°-60°	2979.8	75.0
0°-90°	3972.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3972.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1258	1252	1254	1252	1250	120
15°	1217	1215	1221	1221	1221	344
25°	1128	1128	1145	1149	1149	521
35°	1003	1009	1030	1044	1052	628
45°	843	858	890	927	946	650
55°	652	673	739	800	827	582
65°	431	472	572	650	685	424
75°	195	275	392	390	378	212
85°	43	66	68	62	64	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1255.6	1255.6	1255.6	1255.6	1255.6
2.5°	1261.8	1255.6	1257.7	1255.6	1251.5
5°	1257.7	1251.5	1253.6	1251.5	1249.5
7.5°	1253.6	1247.4	1249.5	1247.4	1247.4
10°	1245.4	1239.2	1243.3	1241.3	1239.2
12.5°	1233.1	1229.0	1233.1	1231.0	1231.0
15°	1216.7	1214.6	1220.8	1220.8	1220.8
17.5°	1200.2	1198.2	1206.4	1206.4	1206.4
20°	1179.7	1177.7	1190.0	1190.0	1190.0
22.5°	1155.1	1153.0	1169.5	1169.5	1169.5
25°	1128.4	1128.4	1144.8	1148.9	1148.9
27.5°	1101.8	1101.8	1120.2	1126.4	1126.4
30°	1073.0	1073.0	1091.5	1099.7	1103.8
32.5°	1038.2	1042.3	1062.8	1073.0	1077.1
35°	1003.3	1009.4	1029.9	1044.3	1052.5
37.5°	966.3	972.5	997.1	1013.5	1023.8
40°	927.4	935.6	962.2	982.8	995.1
42.5°	884.3	896.6	927.4	954.0	970.4
45°	843.2	857.6	890.4	927.4	945.8
47.5°	798.1	814.5	851.5	898.6	917.1
50°	750.9	767.3	812.5	865.8	886.3
52.5°	703.7	722.2	775.5	833.0	857.6
55°	652.4	673.0	738.6	800.2	826.8
57.5°	599.1	623.7	697.6	763.2	792.0
60°	543.7	574.5	656.5	726.3	757.1
62.5°	486.3	523.2	615.5	689.4	722.2
65°	430.9	471.9	572.4	650.4	685.3
67.5°	371.4	422.6	529.3	613.5	646.3
70°	311.9	371.4	484.2	570.4	603.2
72.5°	252.4	324.2	439.1	517.0	517.0
75°	194.9	274.9	391.9	389.8	377.5
77.5°	147.7	229.8	322.1	274.9	277.0
80°	106.7	184.7	203.1	203.1	205.2
82.5°	71.8	141.6	131.3	129.3	133.4
85°	43.1	65.7	67.7	61.6	63.6
87.5°	20.5	22.6	18.5	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)