

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: P261054

Luminaire Tested: **24CZ-LD5-35-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261054
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-35-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3295.0 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

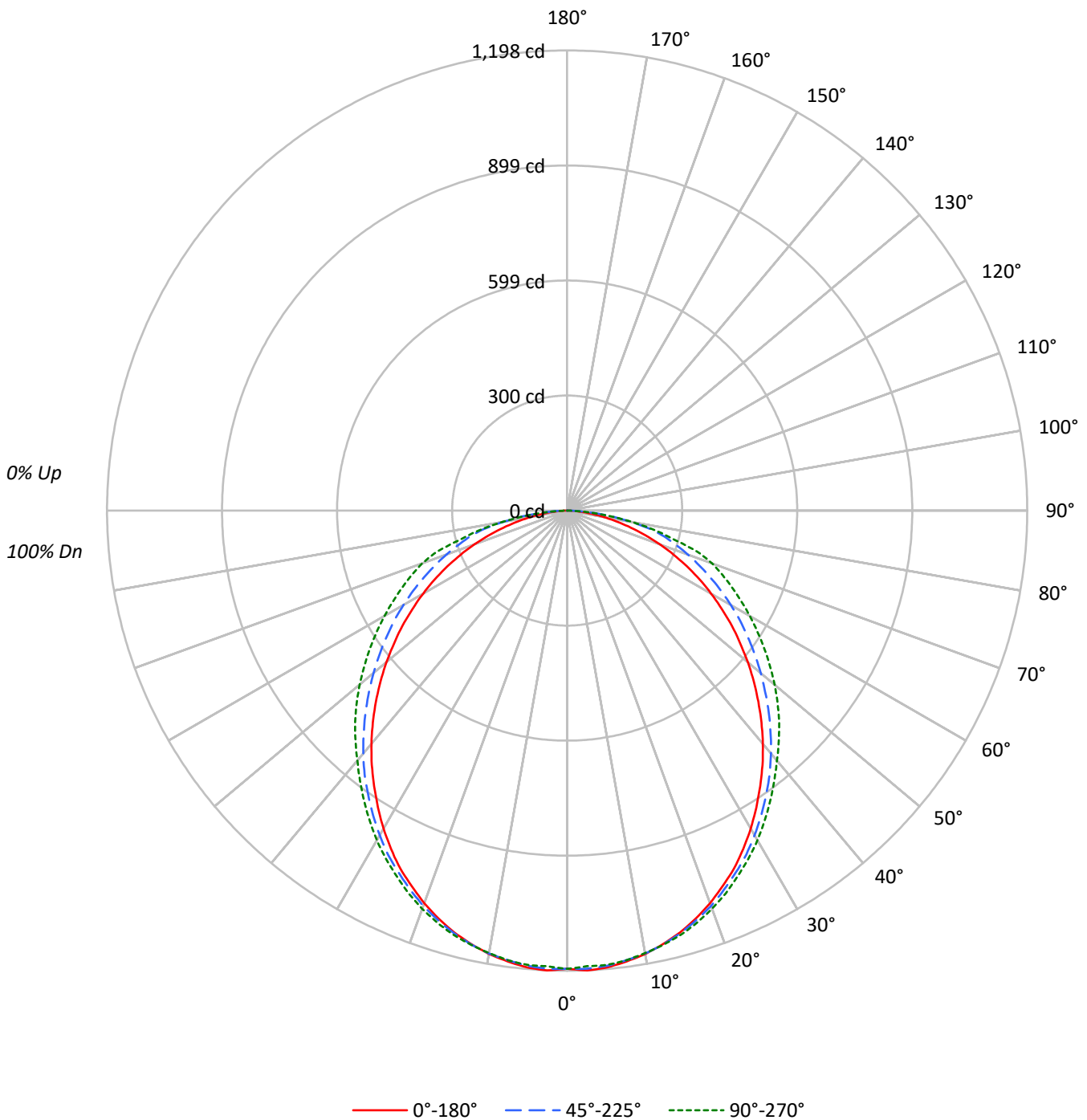
Input Watts (W): 24.80868
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1605	1605	1605
5°	1613	1607	1604
10°	1601	1600	1598
15°	1584	1587	1593
20°	1557	1568	1579
25°	1527	1543	1559
30°	1485	1516	1540
35°	1439	1484	1515
40°	1392	1450	1492
45°	1339	1412	1485
50°	1285	1377	1476
55°	1229	1348	1471
60°	1165	1325	1478
65°	1096	1309	1508
70°	1009	1316	1579
75°	895	1362	1471
80°	748	1292	1325
85°	559	1033	948



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	3.4
10°-20°	320.7	9.7
20°-30°	478.0	14.5
30°-40°	562.7	17.1
40°-50°	571.8	17.4
50°-60°	514.1	15.6
60°-70°	406.1	12.3
70°-80°	257.7	7.8
80°-90°	71.1	2.2
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°	911.5	27.7
0°-40°	1474.2	44.7
0°-60°	2560.1	77.7
0°-90°	3295.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3295.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1193	1193	1193	1193	1193	
5°	1194	1184	1190	1187	1187	113
15°	1137	1132	1139	1142	1144	320
25°	1028	1027	1039	1046	1050	473
35°	876	882	903	913	922	548
45°	704	714	742	764	781	543
55°	524	537	574	612	627	468
65°	344	362	411	456	474	341
75°	172	202	262	285	283	183
85°	36	62	67	61	61	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1192.9	1192.9	1192.9	1192.9	1192.9
2.5°	1198.4	1189.6	1194.0	1191.8	1187.4
5°	1194.0	1184.1	1189.6	1187.4	1187.4
7.5°	1184.1	1176.4	1180.8	1179.7	1180.8
10°	1172.0	1164.4	1170.9	1170.9	1169.8
12.5°	1155.6	1149.0	1156.7	1156.7	1157.8
15°	1137.0	1131.5	1139.1	1142.4	1143.5
17.5°	1113.9	1108.4	1118.3	1121.6	1124.9
20°	1087.6	1085.4	1095.3	1098.6	1103.0
22.5°	1058.0	1058.0	1067.9	1072.3	1078.8
25°	1028.4	1027.3	1039.4	1046.0	1050.3
27.5°	993.3	994.4	1009.8	1016.4	1021.8
30°	956.0	958.2	975.8	983.5	991.1
32.5°	916.6	921.0	940.7	949.5	957.1
35°	876.0	881.5	903.4	913.3	922.1
37.5°	835.4	843.1	866.1	876.0	885.9
40°	792.7	799.3	825.6	837.6	849.7
42.5°	748.8	757.6	783.9	801.5	815.7
45°	703.9	713.7	742.3	764.2	780.6
47.5°	658.9	672.1	699.5	729.1	743.4
50°	614.0	627.1	657.8	690.7	705.0
52.5°	567.9	581.1	616.2	650.2	665.5
55°	524.1	537.2	574.5	611.8	627.1
57.5°	478.0	492.3	533.9	572.3	587.7
60°	433.1	447.3	492.3	532.8	549.3
62.5°	389.2	404.6	451.7	494.5	510.9
65°	344.3	361.8	411.1	456.1	473.6
67.5°	300.4	320.1	371.7	418.8	437.5
70°	256.6	279.6	334.4	382.6	401.3
72.5°	213.8	239.0	297.1	345.4	355.2
75°	172.1	201.7	262.0	285.1	282.9
77.5°	132.7	165.6	222.6	227.0	233.5
80°	96.5	132.7	166.7	175.4	171.0
82.5°	63.6	99.8	119.5	115.1	114.0
85°	36.2	62.5	66.9	61.4	61.4
87.5°	15.3	25.2	21.9	16.4	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)