

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: P260684

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260684
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-35SE-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3265.3 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

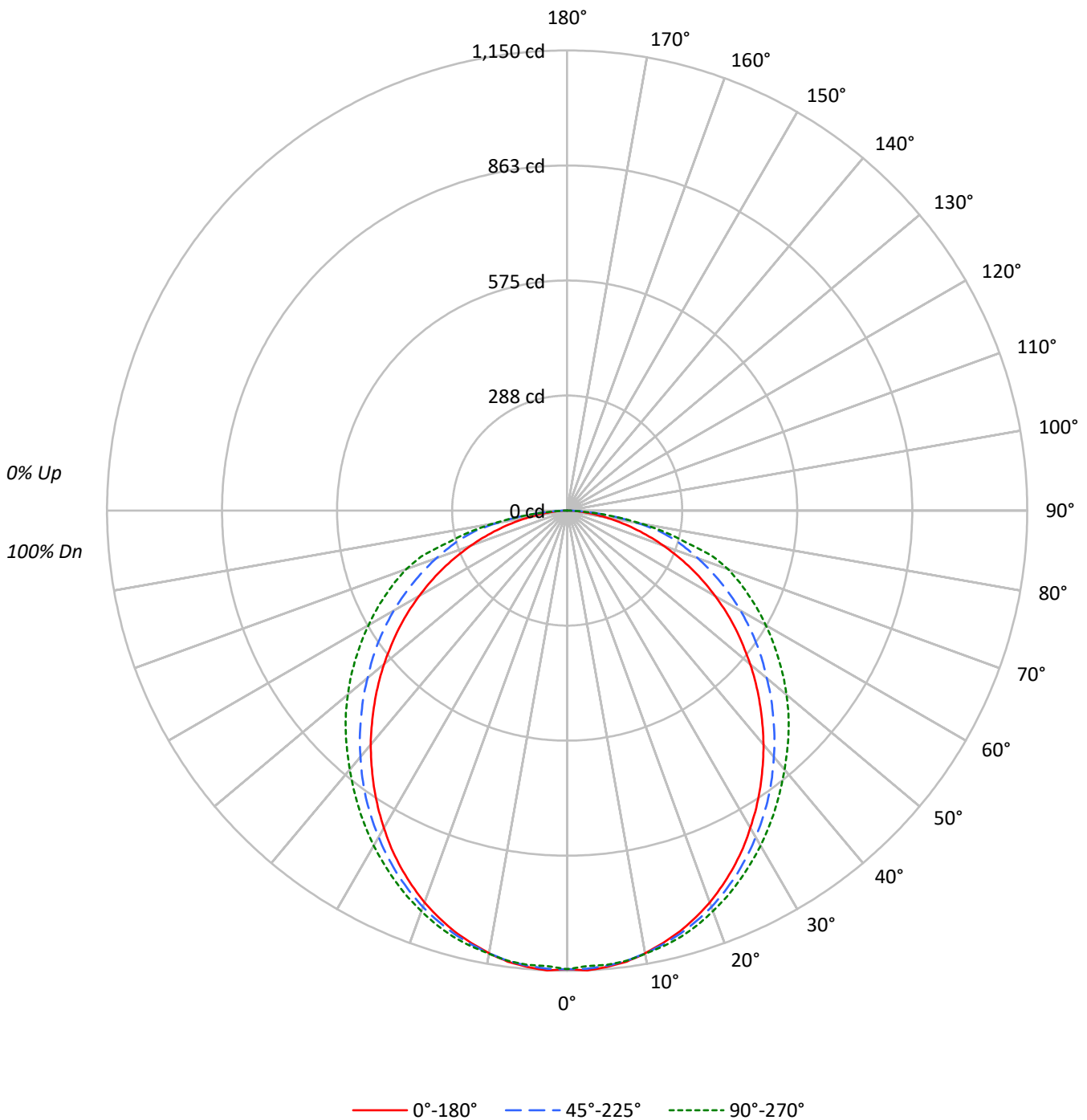
Input Watts (W): 26.71704
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1542	1542	1542
5°	1546	1542	1539
10°	1535	1535	1537
15°	1517	1525	1536
20°	1492	1510	1526
25°	1461	1489	1514
30°	1423	1464	1503
35°	1383	1440	1491
40°	1341	1412	1485
45°	1296	1385	1489
50°	1250	1362	1498
55°	1204	1353	1513
60°	1149	1345	1543
65°	1089	1345	1595
70°	1007	1368	1680
75°	901	1430	1599
80°	754	1368	1464
85°	570	1053	1000



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.3	3.3
10°-20°	308.2	9.4
20°-30°	460.8	14.1
30°-40°	546.6	16.7
40°-50°	562.6	17.2
50°-60°	516.1	15.8
60°-70°	417.3	12.8
70°-80°	270.8	8.3
80°-90°	74.7	2.3
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°	877.2	26.9
0°-40°	1423.8	43.6
0°-60°	2502.5	76.6
0°-90°	3265.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3265.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1146	1146	1146	1146	1146	
5°	1145	1137	1142	1140	1139	109
15°	1089	1084	1094	1099	1102	307
25°	984	985	1003	1012	1020	453
35°	842	849	876	896	908	526
45°	681	692	728	762	783	525
55°	513	529	577	624	645	458
65°	342	362	423	478	501	338
75°	173	206	275	308	308	184
85°	37	63	68	66	65	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1146.0	1146.0	1146.0	1146.0	1146.0
2.5°	1150.4	1141.5	1146.0	1144.8	1139.3
5°	1144.8	1137.0	1141.5	1140.4	1139.3
7.5°	1137.0	1129.2	1134.8	1133.7	1134.8
10°	1123.6	1116.9	1123.6	1124.7	1124.7
12.5°	1106.8	1101.2	1110.2	1112.4	1114.7
15°	1088.9	1084.5	1094.5	1099.0	1102.4
17.5°	1066.6	1063.2	1075.5	1081.1	1085.6
20°	1042.0	1040.9	1054.3	1059.9	1065.5
22.5°	1014.0	1014.0	1029.7	1036.4	1044.2
25°	983.8	985.0	1002.9	1011.8	1019.6
27.5°	951.4	952.5	973.8	985.0	993.9
30°	915.6	920.1	942.5	957.0	967.1
32.5°	879.9	885.5	910.1	926.8	938.0
35°	841.9	848.6	876.5	895.5	907.8
37.5°	802.7	810.6	840.7	862.0	876.5
40°	763.6	772.5	803.8	828.4	845.2
42.5°	722.2	732.3	767.0	796.0	813.9
45°	680.9	692.0	727.8	762.5	782.6
47.5°	639.5	652.9	690.9	728.9	750.2
50°	597.0	610.4	650.7	694.3	715.5
52.5°	554.5	570.2	614.9	659.6	680.9
55°	513.2	528.8	576.9	623.8	645.1
57.5°	470.7	486.3	538.9	588.1	609.3
60°	427.1	445.0	499.8	550.1	573.5
62.5°	384.6	403.6	461.7	515.4	537.8
65°	342.1	362.2	422.6	478.5	500.9
67.5°	298.5	322.0	384.6	441.6	465.1
70°	256.0	281.7	347.7	404.7	427.1
72.5°	214.7	242.6	310.8	368.9	382.4
75°	173.3	205.7	275.0	307.5	307.5
77.5°	134.2	169.9	234.8	247.1	253.8
80°	97.3	136.4	176.6	191.2	188.9
82.5°	64.8	104.0	126.3	126.3	123.0
85°	36.9	62.6	68.2	66.0	64.8
87.5°	15.7	23.5	21.2	16.8	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)