

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: P230001

Luminaire Tested: **24CZ-LD5-35SE-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230001
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-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3040.0 lumens
Efficiency: N/A
Efficacy: 106.4 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

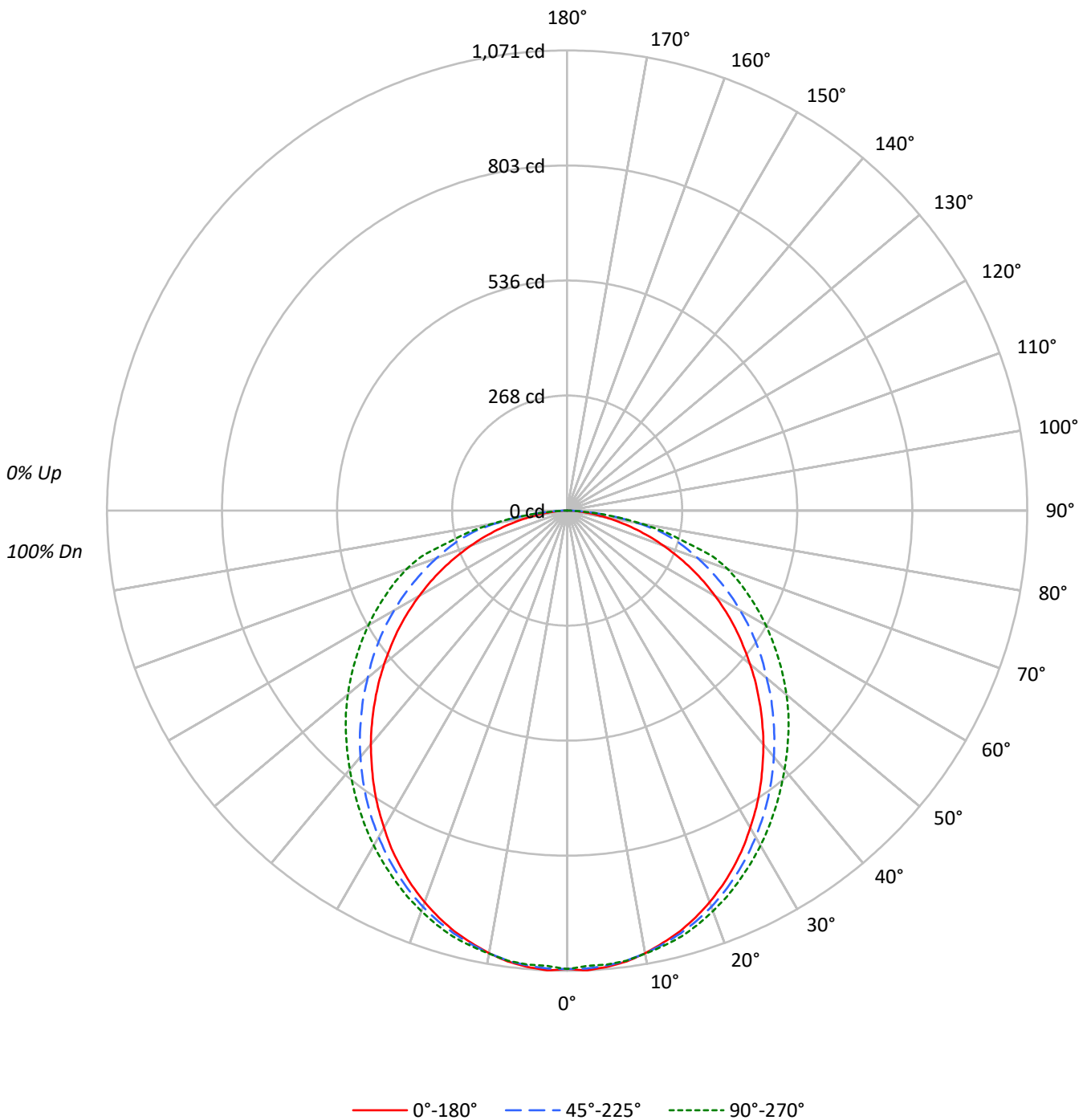
Input Watts (W): 28.57
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1436	1436	1436
5°	1440	1435	1432
10°	1429	1429	1431
15°	1412	1419	1430
20°	1389	1405	1420
25°	1360	1386	1409
30°	1324	1363	1399
35°	1287	1340	1388
40°	1249	1314	1382
45°	1206	1289	1386
50°	1163	1268	1394
55°	1121	1260	1409
60°	1070	1252	1437
65°	1014	1252	1485
70°	938	1273	1564
75°	839	1331	1488
80°	702	1275	1363
85°	530	980	932



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.8	3.3
10°-20°	286.9	9.4
20°-30°	429.0	14.1
30°-40°	508.9	16.7
40°-50°	523.8	17.2
50°-60°	480.5	15.8
60°-70°	388.5	12.8
70°-80°	252.1	8.3
80°-90°	69.5	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°	816.7	26.9
0°-40°	1325.6	43.6
0°-60°	2329.9	76.6
0°-90°	3040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3040.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1066	1059	1063	1062	1061	101
15°	1014	1010	1019	1023	1026	286
25°	916	917	934	942	949	422
35°	784	790	816	834	845	490
45°	634	644	678	710	729	489
55°	478	492	537	581	601	427
65°	318	337	393	446	466	315
75°	161	192	256	286	286	171
85°	34	58	64	61	60	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1066.9	1066.9	1066.9	1066.9	1066.9
2.5°	1071.0	1062.7	1066.9	1065.8	1060.6
5°	1065.8	1058.6	1062.7	1061.7	1060.6
7.5°	1058.6	1051.3	1056.5	1055.4	1056.5
10°	1046.1	1039.8	1046.1	1047.1	1047.1
12.5°	1030.5	1025.2	1033.6	1035.7	1037.7
15°	1013.8	1009.6	1019.0	1023.2	1026.3
17.5°	993.0	989.9	1001.3	1006.5	1010.7
20°	970.1	969.0	981.5	986.7	991.9
22.5°	944.1	944.1	958.6	964.9	972.2
25°	916.0	917.0	933.7	942.0	949.3
27.5°	885.8	886.8	906.6	917.0	925.3
30°	852.5	856.6	877.4	891.0	900.3
32.5°	819.2	824.4	847.3	862.9	873.3
35°	783.8	790.0	816.0	833.7	845.2
37.5°	747.3	754.6	782.7	802.5	816.0
40°	710.9	719.2	748.4	771.3	786.9
42.5°	672.4	681.8	714.0	741.1	757.7
45°	633.9	644.3	677.6	709.9	728.6
47.5°	595.4	607.9	643.3	678.6	698.4
50°	555.8	568.3	605.8	646.4	666.2
52.5°	516.3	530.8	572.5	614.1	633.9
55°	477.8	492.3	537.1	580.8	600.6
57.5°	438.2	452.8	501.7	547.5	567.3
60°	397.6	414.3	465.3	512.1	534.0
62.5°	358.1	375.8	429.9	479.8	500.7
65°	318.5	337.2	393.4	445.5	466.3
67.5°	277.9	299.8	358.1	411.1	433.0
70°	238.4	262.3	323.7	376.8	397.6
72.5°	199.8	225.9	289.4	343.5	356.0
75°	161.3	191.5	256.1	286.2	286.2
77.5°	124.9	158.2	218.6	230.0	236.3
80°	90.6	127.0	164.5	178.0	175.9
82.5°	60.4	96.8	117.6	117.6	114.5
85°	34.3	58.3	63.5	61.4	60.4
87.5°	14.6	21.9	19.8	15.6	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)