

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: P260683

Luminaire Tested: **24CZ-LD5-35SE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260683
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-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3023.5 lumens
Efficiency: N/A
Efficacy: 113.9 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

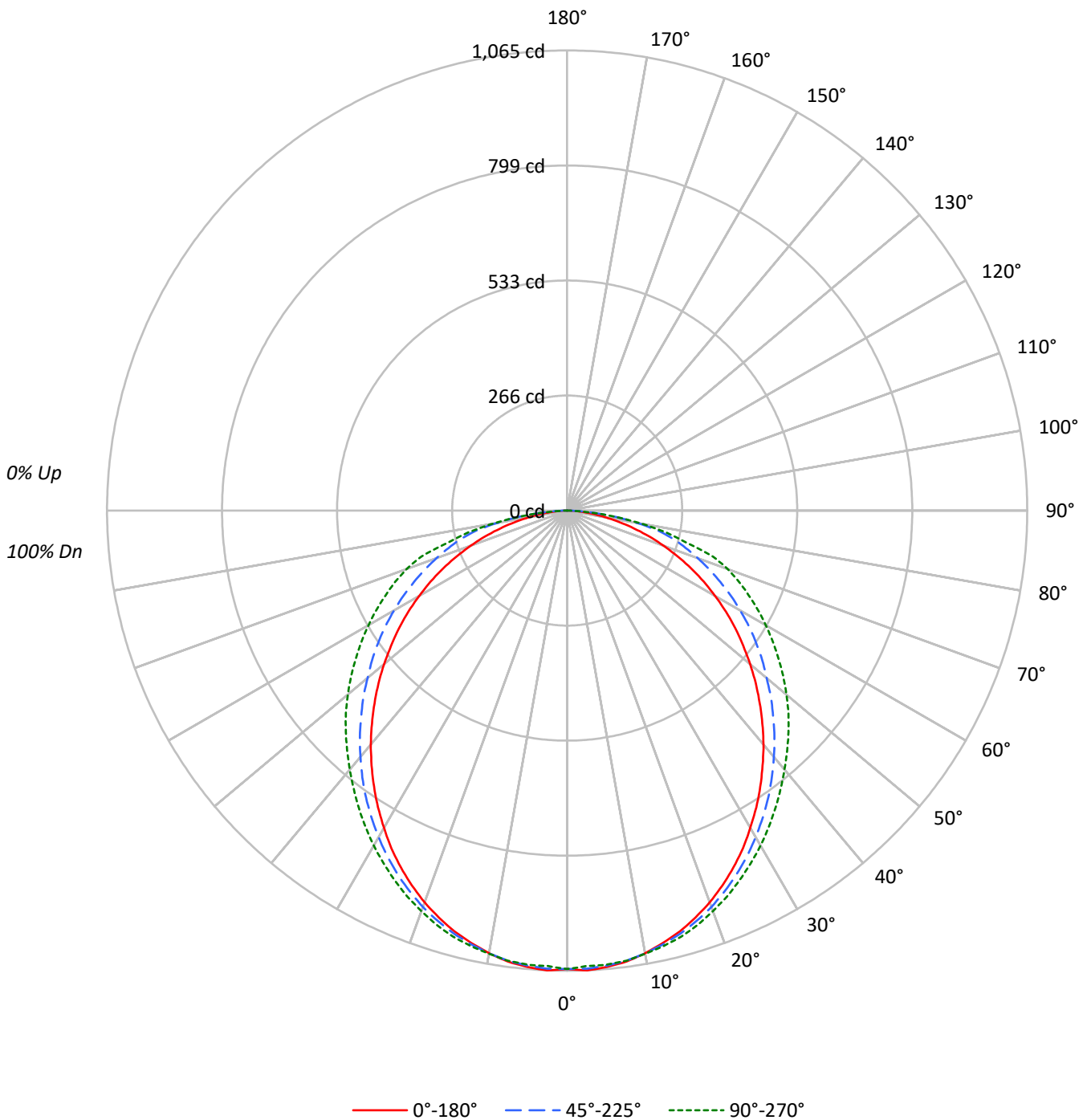
Input Watts (W): 26.53476
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1428	1428	1428
5°	1432	1427	1425
10°	1421	1421	1423
15°	1405	1412	1422
20°	1381	1398	1413
25°	1352	1379	1402
30°	1317	1356	1391
35°	1280	1333	1381
40°	1242	1307	1375
45°	1200	1282	1379
50°	1157	1261	1387
55°	1115	1253	1401
60°	1064	1245	1429
65°	1009	1246	1477
70°	933	1266	1555
75°	834	1324	1480
80°	698	1268	1355
85°	528	974	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	3.3
10°-20°	285.4	9.4
20°-30°	426.6	14.1
30°-40°	506.1	16.7
40°-50°	520.9	17.2
50°-60°	477.9	15.8
60°-70°	386.4	12.8
70°-80°	250.8	8.3
80°-90°	69.1	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°	812.3	26.9
0°-40°	1318.4	43.6
0°-60°	2317.2	76.6
0°-90°	3023.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3023.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1060	1053	1057	1056	1055	101
15°	1008	1004	1014	1018	1021	284
25°	911	912	929	937	944	419
35°	780	786	812	829	841	487
45°	630	641	674	706	725	486
55°	475	490	534	578	597	424
65°	317	335	391	443	464	313
75°	160	190	255	285	285	171
85°	34	58	63	61	60	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1061.1	1061.1	1061.1	1061.1	1061.1
2.5°	1065.2	1056.9	1061.1	1060.0	1054.9
5°	1060.0	1052.8	1056.9	1055.9	1054.9
7.5°	1052.8	1045.5	1050.7	1049.7	1050.7
10°	1040.4	1034.2	1040.4	1041.4	1041.4
12.5°	1024.8	1019.7	1027.9	1030.0	1032.1
15°	1008.3	1004.1	1013.5	1017.6	1020.7
17.5°	987.6	984.5	995.9	1001.0	1005.2
20°	964.8	963.8	976.2	981.4	986.5
22.5°	938.9	938.9	953.4	959.6	966.9
25°	911.0	912.0	928.6	936.9	944.1
27.5°	881.0	882.0	901.7	912.0	920.3
30°	847.8	852.0	872.7	886.1	895.4
32.5°	814.7	819.9	842.6	858.2	868.5
35°	779.5	785.7	811.6	829.2	840.6
37.5°	743.3	750.5	778.5	798.1	811.6
40°	707.0	715.3	744.3	767.1	782.6
42.5°	668.7	678.1	710.1	737.1	753.6
45°	630.4	640.8	673.9	706.0	724.6
47.5°	592.1	604.6	639.7	674.9	694.6
50°	552.8	565.2	602.5	642.9	662.5
52.5°	513.5	527.9	569.4	610.8	630.4
55°	475.2	489.6	534.2	577.6	597.3
57.5°	435.8	450.3	499.0	544.5	564.2
60°	395.4	412.0	462.7	509.3	531.1
62.5°	356.1	373.7	427.5	477.2	497.9
65°	316.8	335.4	391.3	443.1	463.8
67.5°	276.4	298.1	356.1	408.9	430.6
70°	237.1	260.9	321.9	374.7	395.4
72.5°	198.8	224.6	287.8	341.6	354.0
75°	160.5	190.5	254.7	284.7	284.7
77.5°	124.2	157.3	217.4	228.8	235.0
80°	90.1	126.3	163.6	177.0	174.9
82.5°	60.0	96.3	117.0	117.0	113.9
85°	34.2	58.0	63.1	61.1	60.0
87.5°	14.5	21.7	19.7	15.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)