

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: P261052

Luminaire Tested: **24CZ-LD5-35-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261052
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-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2792.5 lumens
Efficiency: N/A
Efficacy: 112.9 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

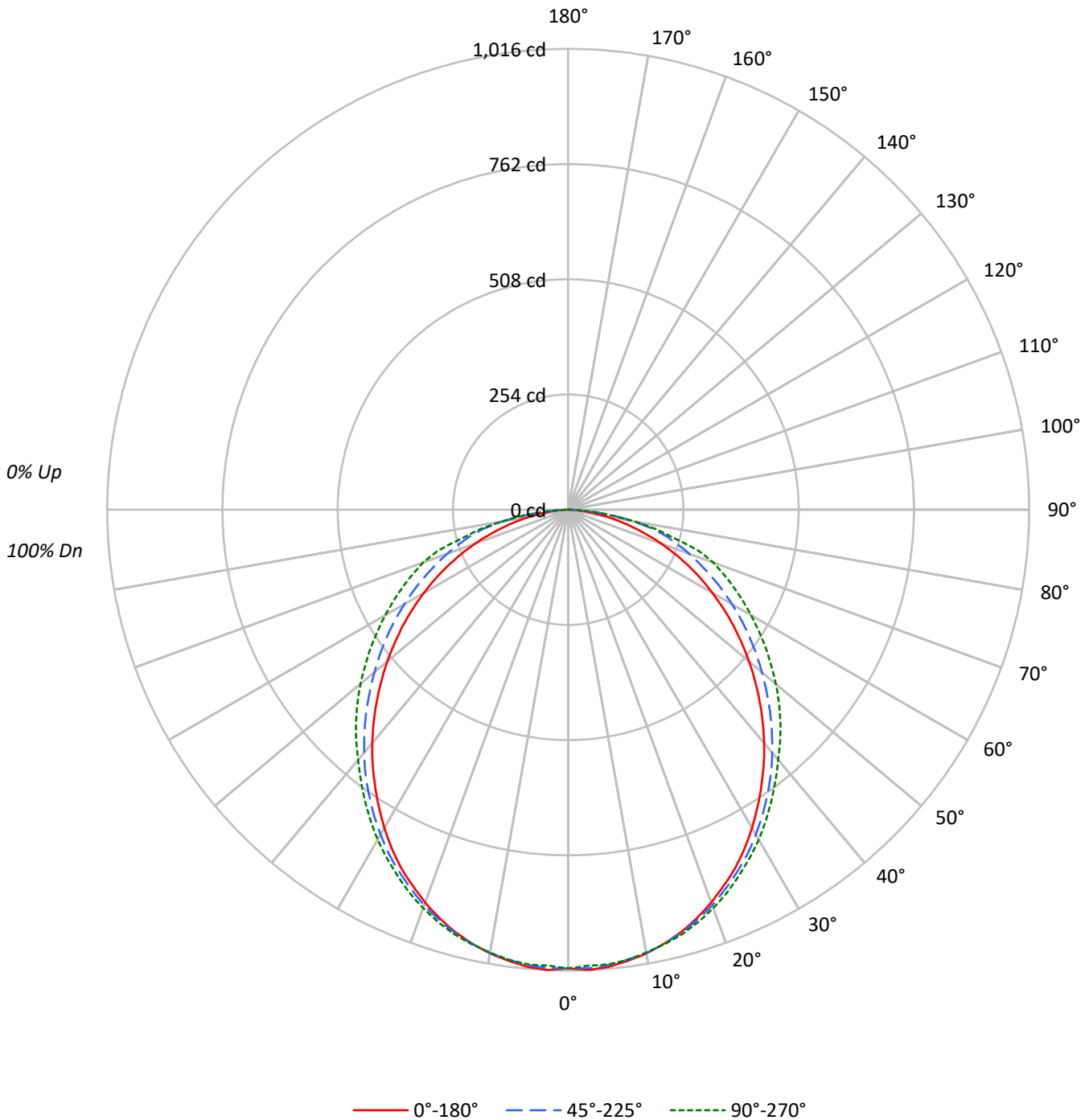
Input Watts (W): 24.73614
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1360	1360	1360
5°	1367	1362	1359
10°	1357	1356	1354
15°	1342	1345	1350
20°	1320	1329	1338
25°	1294	1308	1322
30°	1259	1285	1305
35°	1219	1258	1283
40°	1180	1229	1265
45°	1135	1197	1259
50°	1089	1167	1251
55°	1042	1142	1247
60°	988	1123	1253
65°	929	1109	1278
70°	855	1115	1338
75°	758	1155	1246
80°	634	1094	1124
85°	474	875	803



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	3.4
10°-20°	271.8	9.7
20°-30°	405.1	14.5
30°-40°	476.9	17.1
40°-50°	484.6	17.4
50°-60°	435.7	15.6
60°-70°	344.2	12.3
70°-80°	218.4	7.8
80°-90°	60.3	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°	772.5	27.7
0°-40°	1249.4	44.7
0°-60°	2169.7	77.7
0°-90°	2792.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2792.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1011	1011	1011	1011	1011	
5°	1012	1004	1008	1006	1006	96
15°	964	959	965	968	969	271
25°	872	871	881	886	890	401
35°	742	747	766	774	781	464
45°	596	605	629	648	662	460
55°	444	455	487	518	532	397
65°	292	307	348	386	401	289
75°	146	171	222	242	240	155
85°	31	53	57	52	52	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1011.0	1011.0	1011.0	1011.0	1011.0
2.5°	1015.6	1008.2	1011.9	1010.0	1006.3
5°	1011.9	1003.5	1008.2	1006.3	1006.3
7.5°	1003.5	997.0	1000.7	999.8	1000.7
10°	993.3	986.8	992.4	992.4	991.4
12.5°	979.4	973.8	980.3	980.3	981.2
15°	963.6	958.9	965.4	968.2	969.1
17.5°	944.0	939.4	947.8	950.6	953.3
20°	921.7	919.9	928.3	931.0	934.8
22.5°	896.7	896.7	905.0	908.7	914.3
25°	871.6	870.6	880.9	886.4	890.2
27.5°	841.8	842.8	855.8	861.4	866.0
30°	810.2	812.1	827.0	833.5	840.0
32.5°	776.8	780.5	797.2	804.7	811.2
35°	742.4	747.1	765.6	774.0	781.4
37.5°	708.0	714.5	734.1	742.4	750.8
40°	671.8	677.4	699.7	709.9	720.1
42.5°	634.6	642.1	664.4	679.2	691.3
45°	596.5	604.9	629.1	647.6	661.6
47.5°	558.4	569.6	592.8	617.9	630.0
50°	520.3	531.5	557.5	585.4	597.5
52.5°	481.3	492.5	522.2	551.0	564.0
55°	444.1	455.3	486.9	518.5	531.5
57.5°	405.1	417.2	452.5	485.0	498.0
60°	367.0	379.1	417.2	451.6	465.5
62.5°	329.9	342.9	382.8	419.1	433.0
65°	291.8	306.6	348.4	386.5	401.4
67.5°	254.6	271.3	315.0	354.9	370.7
70°	217.4	236.9	283.4	324.3	340.1
72.5°	181.2	202.6	251.8	292.7	301.1
75°	145.9	171.0	222.1	241.6	239.7
77.5°	112.4	140.3	188.6	192.3	197.9
80°	81.8	112.4	141.2	148.7	145.0
82.5°	53.9	84.6	101.3	97.6	96.6
85°	30.7	53.0	56.7	52.0	52.0
87.5°	13.0	21.4	18.6	13.9	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)