

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: P261357

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261357  
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-LD5-35SE-S-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2956.0 lumens  
Efficiency: N/A  
Efficacy: 114.7 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

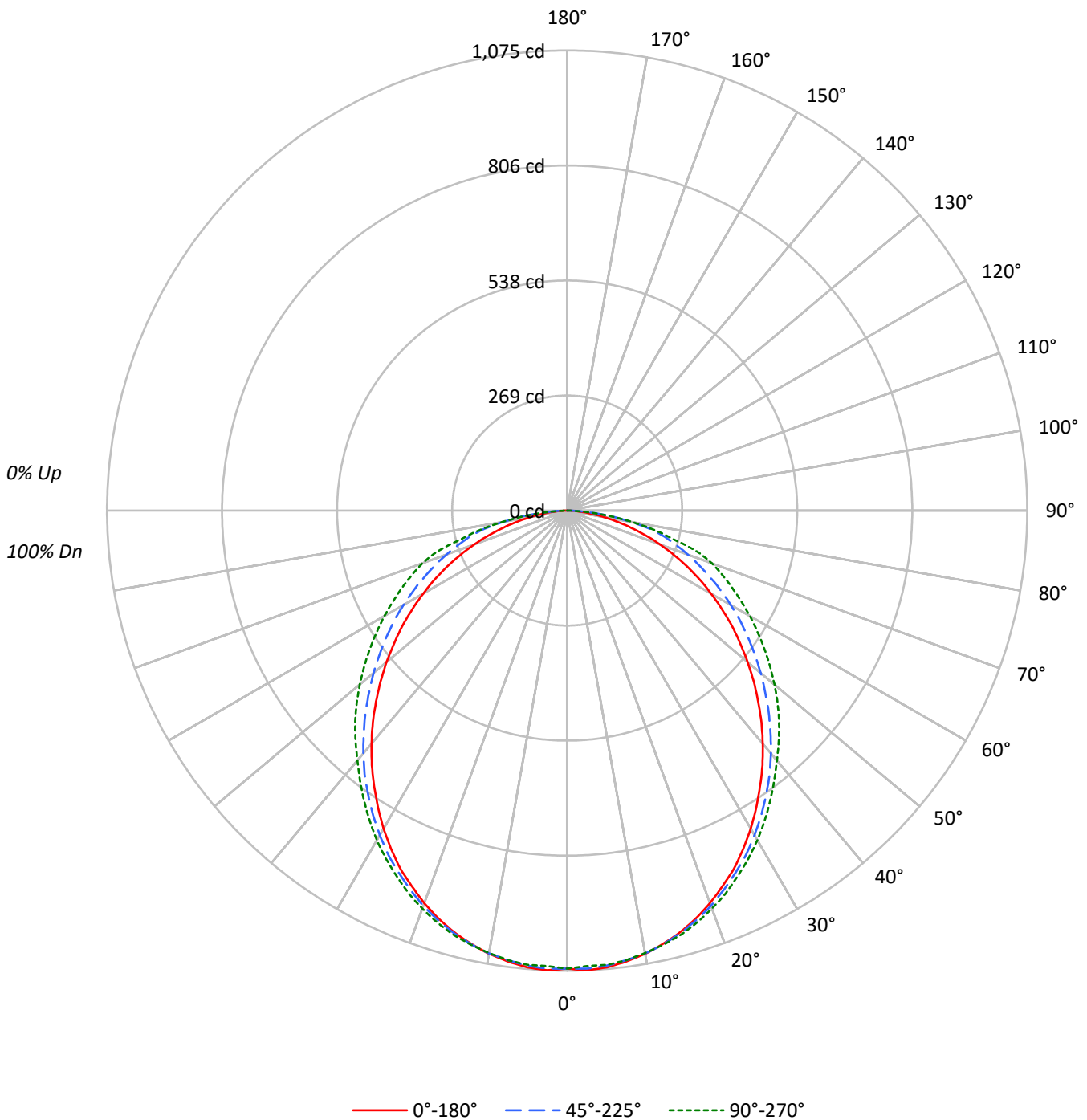
Input Watts (W): 25.761  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1440	1440	1440
5°	1447	1441	1439
10°	1436	1435	1434
15°	1421	1423	1429
20°	1397	1407	1417
25°	1370	1384	1399
30°	1333	1360	1381
35°	1291	1331	1359
40°	1249	1301	1339
45°	1202	1267	1333
50°	1153	1235	1324
55°	1103	1209	1320
60°	1045	1188	1326
65°	983	1174	1353
70°	906	1180	1416
75°	803	1222	1319
80°	671	1158	1189
85°	502	926	851



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.2	3.4
10°-20°	287.7	9.7
20°-30°	428.8	14.5
30°-40°	504.8	17.1
40°-50°	513.0	17.4
50°-60°	461.2	15.6
60°-70°	364.3	12.3
70°-80°	231.2	7.8
80°-90°	63.8	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°	817.7	27.7
0°-40°	1322.5	44.7
0°-60°	2296.7	77.7
0°-90°	2956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2956.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1071	1062	1067	1065	1065	102
15°	1020	1015	1022	1025	1026	287
25°	923	922	932	938	942	424
35°	786	791	810	819	827	492
45°	632	640	666	686	700	487
55°	470	482	515	549	563	420
65°	309	325	369	409	425	306
75°	154	181	235	256	254	164
85°	32	56	60	55	55	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1070.1	1070.1	1070.1	1070.1	1070.1
2.5°	1075.0	1067.2	1071.1	1069.1	1065.2
5°	1071.1	1062.3	1067.2	1065.2	1065.2
7.5°	1062.3	1055.4	1059.3	1058.3	1059.3
10°	1051.4	1044.6	1050.5	1050.5	1049.5
12.5°	1036.7	1030.8	1037.7	1037.7	1038.7
15°	1020.0	1015.0	1021.9	1024.9	1025.9
17.5°	999.3	994.4	1003.2	1006.2	1009.1
20°	975.7	973.7	982.6	985.5	989.5
22.5°	949.1	949.1	958.0	961.9	967.8
25°	922.6	921.6	932.4	938.3	942.3
27.5°	891.1	892.1	905.9	911.8	916.7
30°	857.7	859.6	875.4	882.3	889.1
32.5°	822.3	826.2	843.9	851.8	858.7
35°	785.9	790.8	810.5	819.3	827.2
37.5°	749.5	756.4	777.0	785.9	794.7
40°	711.1	717.0	740.6	751.4	762.3
42.5°	671.8	679.6	703.3	719.0	731.8
45°	631.5	640.3	665.9	685.5	700.3
47.5°	591.1	602.9	627.5	654.1	666.9
50°	550.8	562.6	590.1	619.7	632.4
52.5°	509.5	521.3	552.8	583.3	597.0
55°	470.1	482.0	515.4	548.8	562.6
57.5°	428.8	441.6	479.0	513.4	527.2
60°	388.5	401.3	441.6	478.0	492.8
62.5°	349.2	362.9	405.2	443.6	458.3
65°	308.8	324.6	368.8	409.2	424.9
67.5°	269.5	287.2	333.4	375.7	392.4
70°	230.2	250.8	300.0	343.3	360.0
72.5°	191.8	214.4	266.5	309.8	318.7
75°	154.4	181.0	235.1	255.7	253.8
77.5°	119.0	148.5	199.7	203.6	209.5
80°	86.6	119.0	149.5	157.4	153.4
82.5°	57.0	89.5	107.2	103.3	102.3
85°	32.5	56.1	60.0	55.1	55.1
87.5°	13.8	22.6	19.7	14.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)