

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: P276835

Luminaire Tested: **24CZ2-55HE-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276835  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55HE-RDP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3298.1 lumens  
Efficiency: N/A  
Efficacy: 79.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

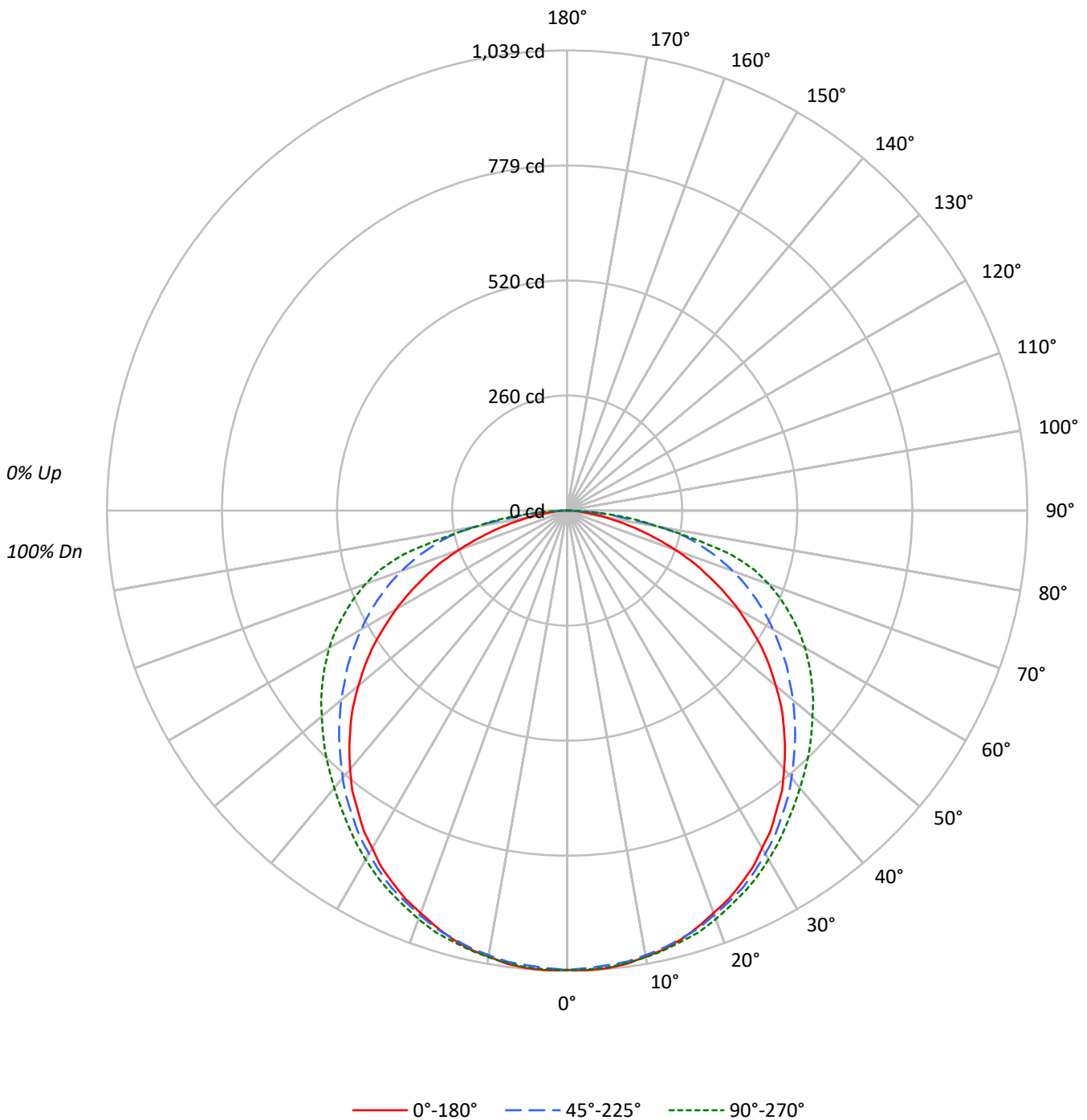
Input Watts (W): 41.766486  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1396	1396	1396
5°	1401	1392	1399
10°	1397	1392	1399
15°	1395	1392	1401
20°	1384	1391	1405
25°	1379	1394	1409
30°	1367	1390	1413
35°	1354	1386	1419
40°	1339	1385	1437
45°	1317	1385	1469
50°	1288	1394	1514
55°	1255	1416	1581
60°	1202	1444	1668
65°	1125	1495	1771
70°	1023	1564	1905
75°	868	1650	1990
80°	684	1660	1610
85°	505	1263	1414



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.4	3.0
10°-20°	283.1	8.6
20°-30°	433.0	13.1
30°-40°	529.3	16.0
40°-50°	564.2	17.1
50°-60°	539.4	16.4
60°-70°	456.9	13.9
70°-80°	307.1	9.3
80°-90°	86.6	2.6
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°	814.5	24.7
0°-40°	1343.9	40.7
0°-60°	2447.4	74.2
0°-90°	3298.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3298.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	1037	1036	1031	1036	1036	99
15°	1001	1001	1000	1008	1006	282
25°	929	932	939	947	949	428
35°	824	831	844	860	864	517
45°	692	703	728	759	772	534
55°	535	555	604	651	674	476
65°	353	389	470	532	556	351
75°	167	227	317	371	383	179
85°	33	67	82	88	92	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1037.2	1037.2	1037.2	1037.2	1037.2
2.5°	1038.8	1038.8	1033.9	1037.2	1037.2
5°	1037.2	1035.5	1030.6	1035.5	1035.5
7.5°	1032.3	1030.6	1027.3	1032.3	1030.6
10°	1022.4	1022.4	1019.2	1024.1	1024.1
12.5°	1014.3	1012.6	1011.0	1017.5	1015.9
15°	1001.2	1001.2	999.5	1007.7	1006.1
17.5°	984.8	986.4	988.1	994.6	996.3
20°	966.8	970.1	971.7	981.5	981.5
22.5°	950.5	952.1	955.4	965.2	965.2
25°	929.2	932.5	939.0	947.2	948.8
27.5°	907.9	909.6	917.7	929.2	930.8
30°	880.1	885.0	894.8	907.9	909.6
32.5°	855.6	860.5	871.9	885.0	888.3
35°	824.5	831.0	844.1	860.5	863.8
37.5°	796.7	801.6	817.9	835.9	840.9
40°	762.3	772.1	788.5	809.8	817.9
42.5°	728.0	737.8	757.4	785.2	795.0
45°	692.0	703.4	728.0	759.1	772.1
47.5°	656.0	669.1	696.9	732.9	747.6
50°	615.1	631.5	665.8	706.7	723.1
52.5°	575.8	595.5	633.1	678.9	700.2
55°	534.9	554.6	603.6	651.1	674.0
57.5°	489.1	515.3	569.3	623.3	647.8
60°	446.6	471.1	536.6	595.5	620.0
62.5°	400.8	433.5	503.9	566.0	590.6
65°	353.4	389.3	469.5	531.7	556.2
67.5°	310.8	350.1	435.1	497.3	521.9
70°	260.1	309.2	397.5	459.7	484.2
72.5°	212.7	266.7	358.3	418.8	441.7
75°	166.9	227.4	317.4	371.3	382.8
77.5°	124.3	188.1	274.8	297.7	289.6
80°	88.3	150.5	214.3	202.9	207.8
82.5°	57.3	114.5	132.5	150.5	155.4
85°	32.7	67.1	81.8	88.3	91.6
87.5°	14.7	24.5	32.7	32.7	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)