

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: P276757

Luminaire Tested: **24CZ2-55HE-RDP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276757  
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-L83050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3337.0 lumens  
Efficiency: N/A  
Efficacy: 83.4 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

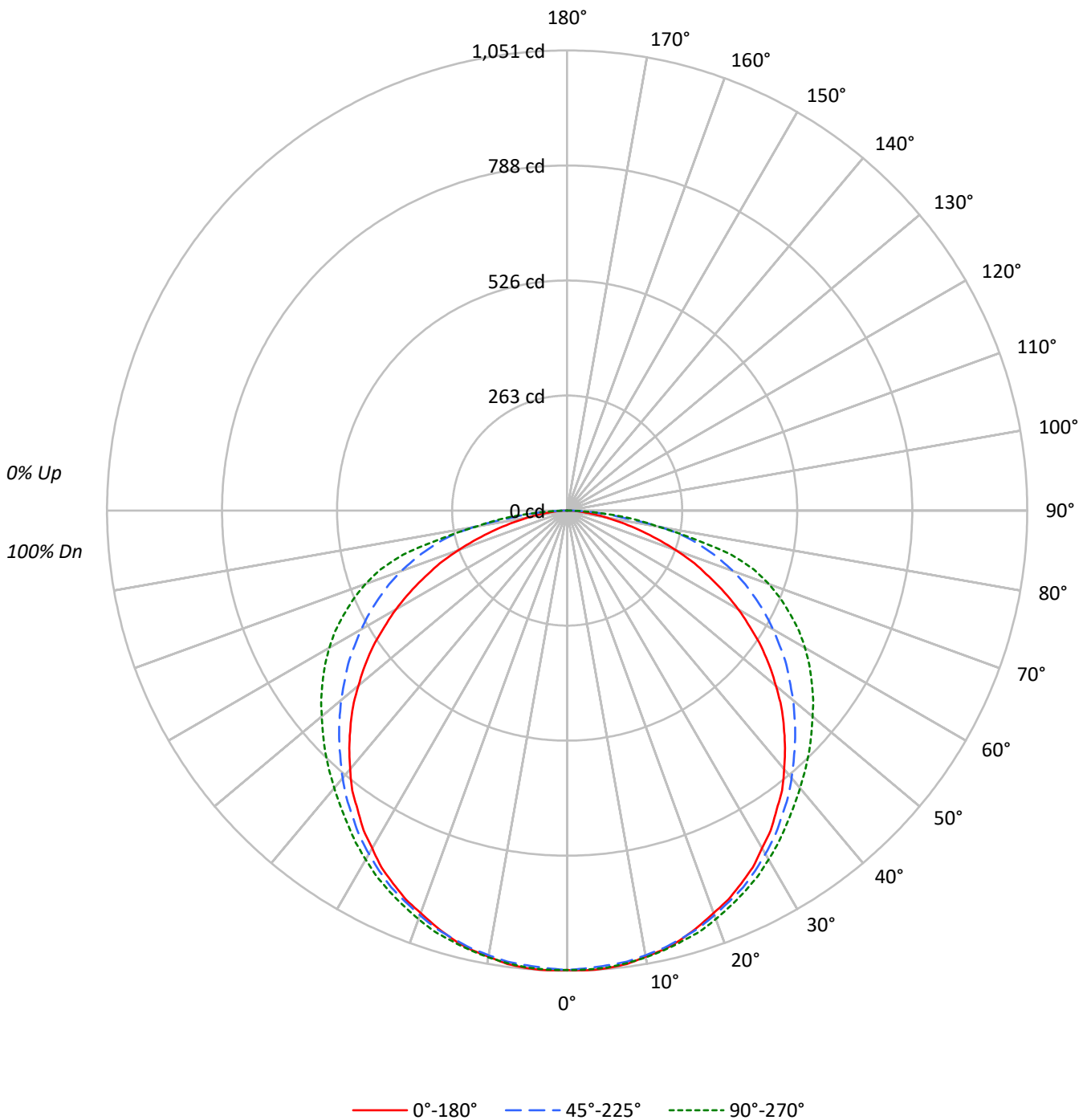
Input Watts (W): 40.002834  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1412	1412	1412
5°	1417	1408	1415
10°	1413	1409	1416
15°	1411	1409	1418
20°	1401	1408	1422
25°	1396	1411	1425
30°	1384	1407	1430
35°	1370	1403	1435
40°	1355	1401	1454
45°	1332	1402	1487
50°	1303	1410	1531
55°	1270	1433	1600
60°	1216	1461	1688
65°	1138	1512	1792
70°	1035	1582	1927
75°	878	1669	2013
80°	693	1680	1629
85°	511	1278	1431



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.5	3.0
10°-20°	286.5	8.6
20°-30°	438.1	13.1
30°-40°	535.6	16.0
40°-50°	570.8	17.1
50°-60°	545.8	16.4
60°-70°	462.3	13.9
70°-80°	310.7	9.3
80°-90°	87.7	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°	824.1	24.7
0°-40°	1359.7	40.7
0°-60°	2476.3	74.2
0°-90°	3337.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3337.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1049	1049	1049	1049	1049	
5°	1049	1048	1043	1048	1048	100
15°	1013	1013	1011	1020	1018	286
25°	940	944	950	958	960	433
35°	834	841	854	871	874	523
45°	700	712	737	768	781	540
55°	541	561	611	659	682	482
65°	358	394	475	538	563	355
75°	169	230	321	376	387	181
85°	33	68	83	89	93	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1049.4	1049.4	1049.4	1049.4	1049.4
2.5°	1051.0	1051.0	1046.1	1049.4	1049.4
5°	1049.4	1047.7	1042.8	1047.7	1047.7
7.5°	1044.4	1042.8	1039.5	1044.4	1042.8
10°	1034.5	1034.5	1031.2	1036.1	1036.1
12.5°	1026.2	1024.6	1022.9	1029.5	1027.9
15°	1013.0	1013.0	1011.3	1019.6	1017.9
17.5°	996.4	998.1	999.7	1006.4	1008.0
20°	978.2	981.5	983.2	993.1	993.1
22.5°	961.7	963.3	966.6	976.6	976.6
25°	940.1	943.5	950.1	958.4	960.0
27.5°	918.6	920.3	928.6	940.1	941.8
30°	890.5	895.5	905.4	918.6	920.3
32.5°	865.7	870.6	882.2	895.5	898.8
35°	834.2	840.8	854.1	870.6	873.9
37.5°	806.1	811.0	827.6	845.8	850.8
40°	771.3	781.3	797.8	819.3	827.6
42.5°	736.6	746.5	766.4	794.5	804.4
45°	700.1	711.7	736.6	768.0	781.3
47.5°	663.7	677.0	705.1	741.5	756.4
50°	622.4	638.9	673.7	715.0	731.6
52.5°	582.6	602.5	640.6	686.9	708.4
55°	541.2	561.1	610.8	658.8	681.9
57.5°	494.9	521.4	576.0	630.6	655.5
60°	451.9	476.7	542.9	602.5	627.3
62.5°	405.5	438.6	509.8	572.7	597.5
65°	357.5	393.9	475.0	537.9	562.8
67.5°	314.5	354.2	440.3	503.2	528.0
70°	263.2	312.8	402.2	465.1	489.9
72.5°	215.2	269.8	362.5	423.7	446.9
75°	168.8	230.1	321.1	375.7	387.3
77.5°	125.8	190.3	278.1	301.2	293.0
80°	89.4	152.3	216.8	205.2	210.2
82.5°	57.9	115.9	134.1	152.3	157.2
85°	33.1	67.9	82.8	89.4	92.7
87.5°	14.9	24.8	33.1	33.1	31.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)