

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: P276842

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276842  
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: 24CZ2-65HE-RDP-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3235.3 lumens  
Efficiency: N/A  
Efficacy: 64.7 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

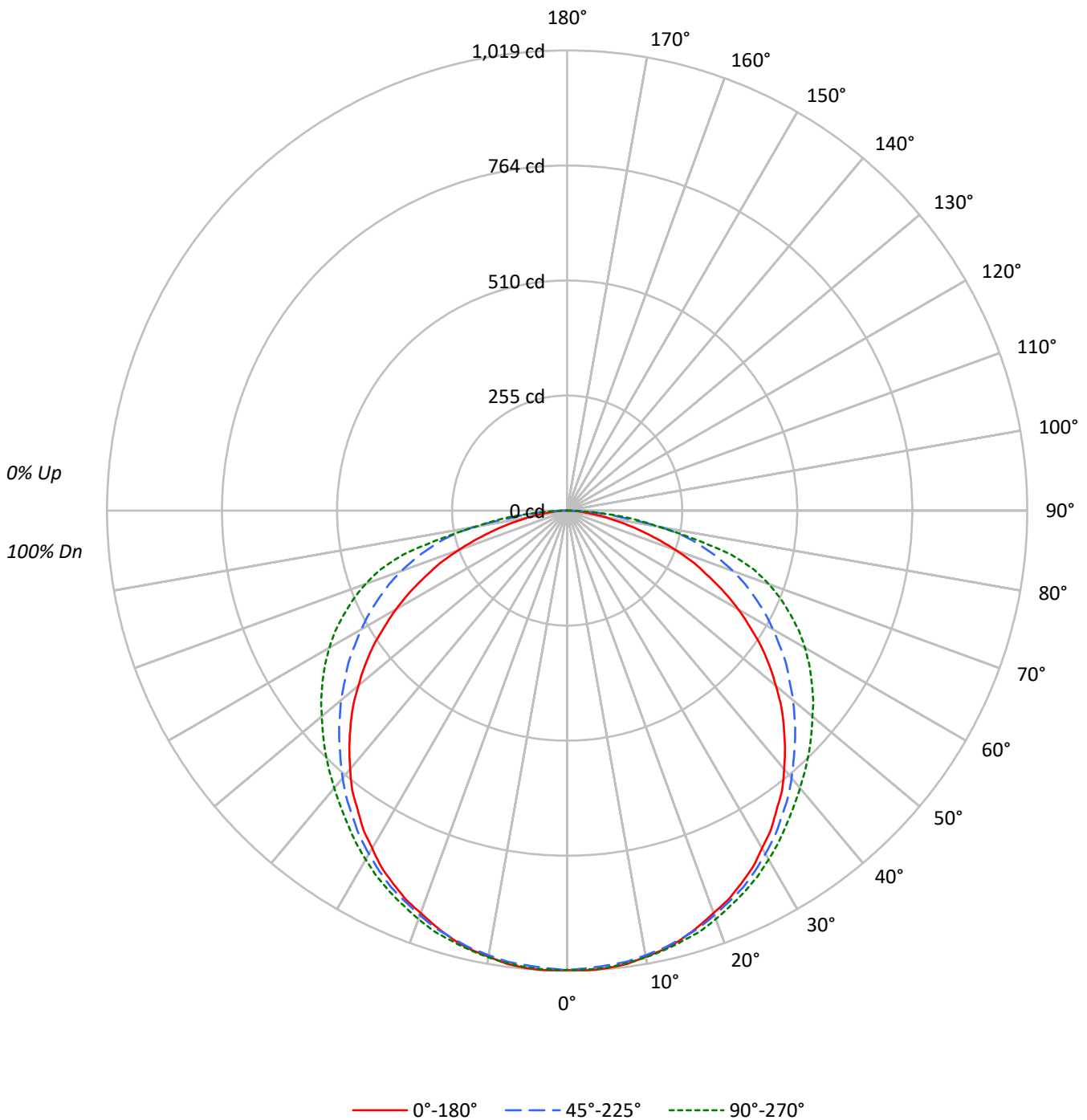
Input Watts (W): 50.043114  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1369	1369	1369
5°	1374	1365	1372
10°	1370	1366	1373
15°	1368	1366	1375
20°	1358	1365	1379
25°	1353	1367	1382
30°	1341	1364	1386
35°	1328	1360	1392
40°	1313	1359	1409
45°	1292	1359	1441
50°	1263	1367	1485
55°	1231	1389	1551
60°	1179	1417	1637
65°	1103	1466	1737
70°	1004	1534	1869
75°	851	1618	1952
80°	672	1629	1579
85°	496	1238	1388



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.5	3.0
10°-20°	277.8	8.6
20°-30°	424.8	13.1
30°-40°	519.3	16.0
40°-50°	553.4	17.1
50°-60°	529.1	16.4
60°-70°	448.2	13.9
70°-80°	301.3	9.3
80°-90°	85.0	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°	799.0	24.7
0°-40°	1318.3	40.7
0°-60°	2400.8	74.2
0°-90°	3235.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3235.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	1017	1016	1011	1016	1016	97
15°	982	982	980	988	987	277
25°	912	915	921	929	931	420
35°	809	815	828	844	847	507
45°	679	690	714	745	757	524
55°	525	544	592	639	661	467
65°	347	382	461	522	546	344
75°	164	223	311	364	376	175
85°	32	66	80	87	90	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1017.4	1017.4	1017.4	1017.4	1017.4
2.5°	1019.0	1019.0	1014.2	1017.4	1017.4
5°	1017.4	1015.8	1011.0	1015.8	1015.8
7.5°	1012.6	1011.0	1007.8	1012.6	1011.0
10°	1003.0	1003.0	999.8	1004.6	1004.6
12.5°	994.9	993.3	991.7	998.2	996.6
15°	982.1	982.1	980.5	988.5	986.9
17.5°	966.1	967.7	969.3	975.7	977.3
20°	948.4	951.6	953.2	962.9	962.9
22.5°	932.4	934.0	937.2	946.8	946.8
25°	911.5	914.7	921.1	929.2	930.8
27.5°	890.6	892.2	900.3	911.5	913.1
30°	863.4	868.2	877.8	890.6	892.2
32.5°	839.3	844.1	855.3	868.2	871.4
35°	808.8	815.2	828.1	844.1	847.3
37.5°	781.5	786.3	802.4	820.0	824.8
40°	747.8	757.4	773.5	794.4	802.4
42.5°	714.1	723.7	743.0	770.3	779.9
45°	678.8	690.0	714.1	744.6	757.4
47.5°	643.5	656.3	683.6	718.9	733.4
50°	603.4	619.4	653.1	693.3	709.3
52.5°	564.9	584.1	621.0	666.0	686.8
55°	524.8	544.0	592.2	638.7	661.2
57.5°	479.8	505.5	558.5	611.4	635.5
60°	438.1	462.2	526.4	584.1	608.2
62.5°	393.2	425.3	494.3	555.2	579.3
65°	346.6	381.9	460.6	521.5	545.6
67.5°	304.9	343.4	426.9	487.8	511.9
70°	255.2	303.3	390.0	450.9	475.0
72.5°	208.6	261.6	351.4	410.8	433.3
75°	163.7	223.1	311.3	364.3	375.5
77.5°	122.0	184.5	269.6	292.1	284.0
80°	86.7	147.6	210.2	199.0	203.8
82.5°	56.2	112.3	130.0	147.6	152.5
85°	32.1	65.8	80.2	86.7	89.9
87.5°	14.4	24.1	32.1	32.1	30.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)