

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: P263089

Luminaire Tested: **24CZ-LD5-45-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263089  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-45-SQP-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3118.0 lumens  
Efficiency: N/A  
Efficacy: 97.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

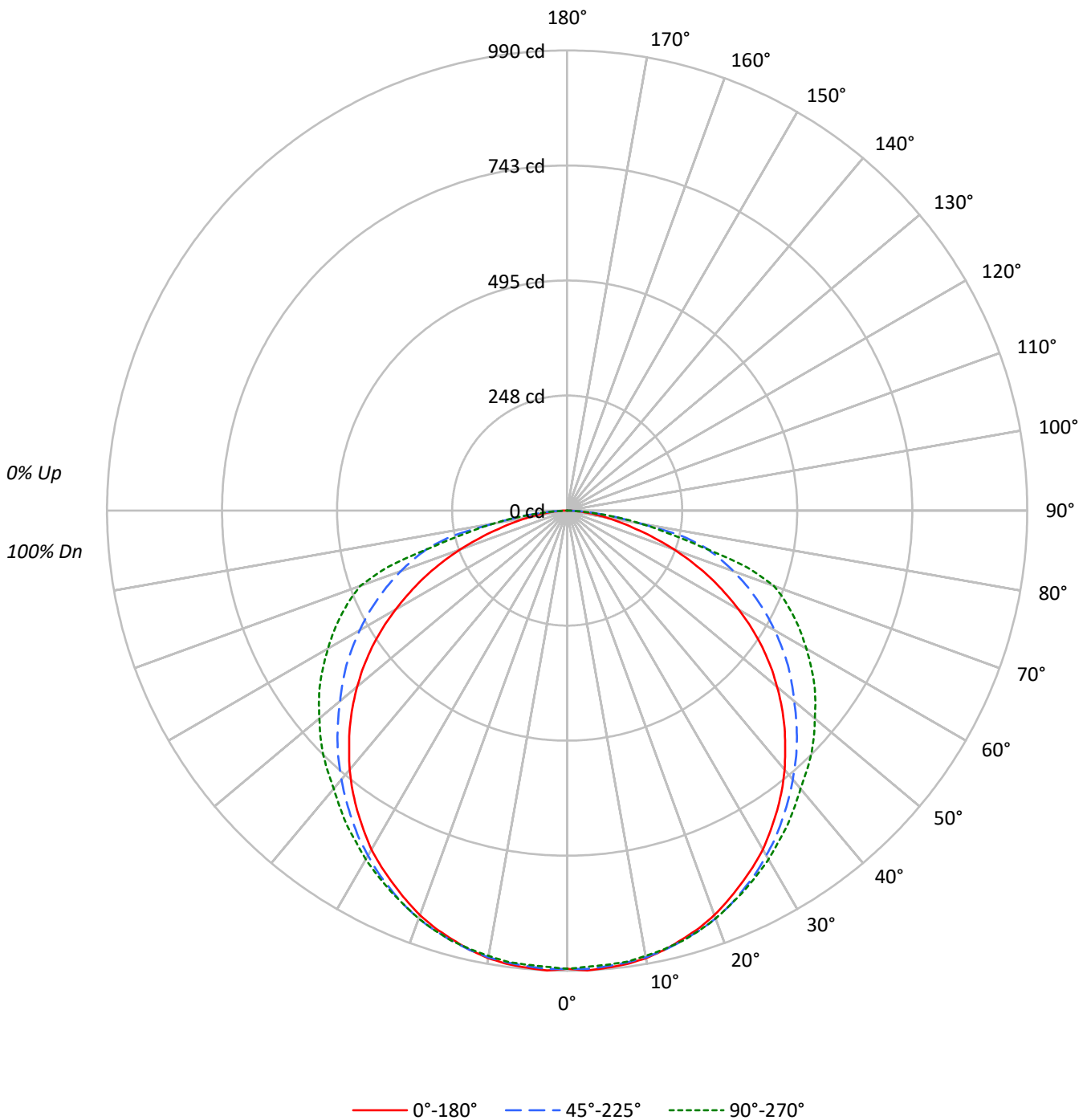
Input Watts (W): 32.156982  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1326	1326	1326
5°	1333	1329	1325
10°	1336	1333	1329
15°	1330	1335	1335
20°	1326	1337	1337
25°	1315	1334	1339
30°	1309	1331	1346
35°	1294	1328	1357
40°	1279	1327	1372
45°	1259	1330	1413
50°	1234	1335	1456
55°	1202	1360	1523
60°	1149	1387	1599
65°	1077	1430	1713
70°	963	1495	1863
75°	795	1599	1540
80°	649	1235	1248
85°	522	820	770



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.6	3.0
10°-20°	270.1	8.7
20°-30°	412.8	13.2
30°-40°	504.9	16.2
40°-50°	540.3	17.3
50°-60°	517.4	16.6
60°-70°	437.6	14.0
70°-80°	277.4	8.9
80°-90°	63.8	2.0
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°	776.6	24.9
0°-40°	1281.5	41.1
0°-60°	2339.1	75.0
0°-90°	3118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3118.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	986	986	986	986	986	
5°	987	982	984	982	981	94
15°	955	953	958	958	958	270
25°	886	886	899	902	902	409
35°	788	792	808	820	826	493
45°	662	673	699	728	742	510
55°	512	528	580	628	649	457
65°	338	370	449	510	538	333
75°	153	216	308	306	296	166
85°	34	52	53	48	50	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	985.7	985.7	985.7	985.7	985.7
2.5°	990.5	985.7	987.3	985.7	982.4
5°	987.3	982.4	984.0	982.4	980.8
7.5°	984.0	979.2	980.8	979.2	979.2
10°	977.6	972.8	976.0	974.4	972.8
12.5°	967.9	964.7	967.9	966.3	966.3
15°	955.1	953.4	958.3	958.3	958.3
17.5°	942.2	940.6	947.0	947.0	947.0
20°	926.1	924.5	934.1	934.1	934.1
22.5°	906.7	905.1	918.0	918.0	918.0
25°	885.8	885.8	898.7	901.9	901.9
27.5°	864.9	864.9	879.4	884.2	884.2
30°	842.3	842.3	856.8	863.3	866.5
32.5°	814.9	818.2	834.3	842.3	845.5
35°	787.6	792.4	808.5	819.8	826.2
37.5°	758.6	763.4	782.7	795.6	803.7
40°	728.0	734.4	755.3	771.5	781.1
42.5°	694.1	703.8	728.0	748.9	761.8
45°	661.9	673.2	699.0	728.0	742.5
47.5°	626.5	639.4	668.4	705.4	719.9
50°	589.5	602.3	637.8	679.7	695.8
52.5°	552.4	566.9	608.8	653.9	673.2
55°	512.2	528.3	579.8	628.1	649.1
57.5°	470.3	489.6	547.6	599.1	621.7
60°	426.8	451.0	515.4	570.1	594.3
62.5°	381.7	410.7	483.2	541.1	566.9
65°	338.2	370.4	449.3	510.5	537.9
67.5°	291.5	331.8	415.5	481.6	507.3
70°	244.8	291.5	380.1	447.7	473.5
72.5°	198.1	254.5	344.7	405.9	405.9
75°	153.0	215.8	307.6	306.0	296.3
77.5°	116.0	180.4	252.9	215.8	217.4
80°	83.7	144.9	159.4	159.4	161.1
82.5°	56.4	111.1	103.1	101.5	104.7
85°	33.8	51.5	53.1	48.3	49.9
87.5°	16.1	17.7	14.5	9.7	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)