

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: P276852

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276852  
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: 24CZ2-75HE-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: 3731.3 lumens  
Efficiency: N/A  
Efficacy: 62.5 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

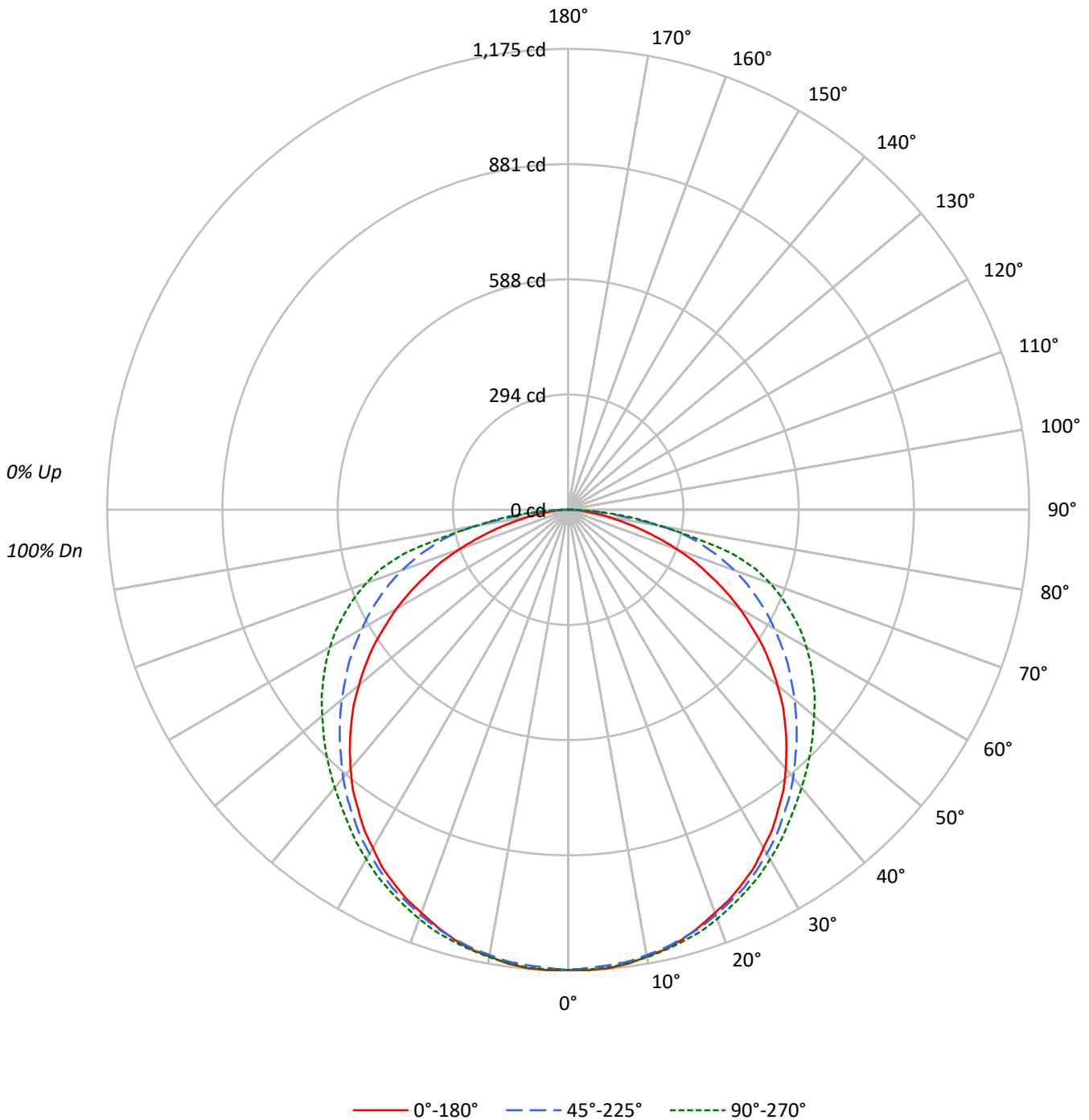
Input Watts (W): 59.747292  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1579	1579	1579
5°	1585	1575	1582
10°	1580	1575	1583
15°	1578	1575	1585
20°	1566	1574	1590
25°	1561	1577	1594
30°	1547	1573	1599
35°	1532	1569	1605
40°	1515	1567	1625
45°	1490	1567	1662
50°	1457	1577	1712
55°	1420	1602	1789
60°	1360	1634	1887
65°	1273	1691	2004
70°	1158	1769	2155
75°	981	1866	2252
80°	774	1879	1821
85°	571	1428	1599



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.3	3.0
10°-20°	320.3	8.6
20°-30°	489.9	13.1
30°-40°	598.9	16.0
40°-50°	638.3	17.1
50°-60°	610.3	16.4
60°-70°	517.0	13.9
70°-80°	347.4	9.3
80°-90°	98.0	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°	921.5	24.7
0°-40°	1520.4	40.7
0°-60°	2768.9	74.2
0°-90°	3731.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3731.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1173	1173	1173	1173	1173	
5°	1173	1172	1166	1172	1172	111
15°	1133	1133	1131	1140	1138	319
25°	1051	1055	1062	1072	1073	485
35°	933	940	955	974	977	584
45°	783	796	824	859	874	604
55°	605	627	683	737	762	539
65°	400	440	531	602	629	397
75°	189	257	359	420	433	202
85°	37	76	92	100	104	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1173.4	1173.4	1173.4	1173.4	1173.4
2.5°	1175.2	1175.2	1169.7	1173.4	1173.4
5°	1173.4	1171.5	1166.0	1171.5	1171.5
7.5°	1167.8	1166.0	1162.3	1167.8	1166.0
10°	1156.7	1156.7	1153.0	1158.6	1158.6
12.5°	1147.5	1145.6	1143.8	1151.2	1149.3
15°	1132.7	1132.7	1130.8	1140.1	1138.2
17.5°	1114.2	1116.0	1117.9	1125.3	1127.1
20°	1093.8	1097.5	1099.4	1110.5	1110.5
22.5°	1075.3	1077.1	1080.8	1092.0	1092.0
25°	1051.2	1054.9	1062.3	1071.6	1073.4
27.5°	1027.2	1029.0	1038.3	1051.2	1053.1
30°	995.7	1001.3	1012.4	1027.2	1029.0
32.5°	968.0	973.5	986.5	1001.3	1005.0
35°	932.8	940.2	955.0	973.5	977.2
37.5°	901.3	906.9	925.4	945.7	951.3
40°	862.5	873.6	892.1	916.1	925.4
42.5°	823.6	834.7	856.9	888.4	899.5
45°	782.9	795.8	823.6	858.8	873.6
47.5°	742.2	757.0	788.4	829.1	845.8
50°	695.9	714.4	753.3	799.5	818.0
52.5°	651.5	673.7	716.2	768.1	792.1
55°	605.2	627.4	682.9	736.6	762.5
57.5°	553.4	583.0	644.1	705.1	732.9
60°	505.3	533.0	607.1	673.7	701.4
62.5°	453.4	490.5	570.0	640.4	668.1
65°	399.8	440.5	531.2	601.5	629.3
67.5°	351.6	396.1	492.3	562.6	590.4
70°	294.3	349.8	449.7	520.1	547.8
72.5°	240.6	301.7	405.3	473.8	499.7
75°	188.8	257.3	359.0	420.1	433.1
77.5°	140.7	212.8	310.9	336.8	327.6
80°	99.9	170.3	242.5	229.5	235.0
82.5°	64.8	129.6	149.9	170.3	175.8
85°	37.0	75.9	92.5	99.9	103.6
87.5°	16.7	27.8	37.0	37.0	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)