

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: P276936

Luminaire Tested: **24CZ2-60HE-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276936  
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: 24CZ2-60HE-RDP-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3521.6 lumens  
Efficiency: N/A  
Efficacy: 79.6 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

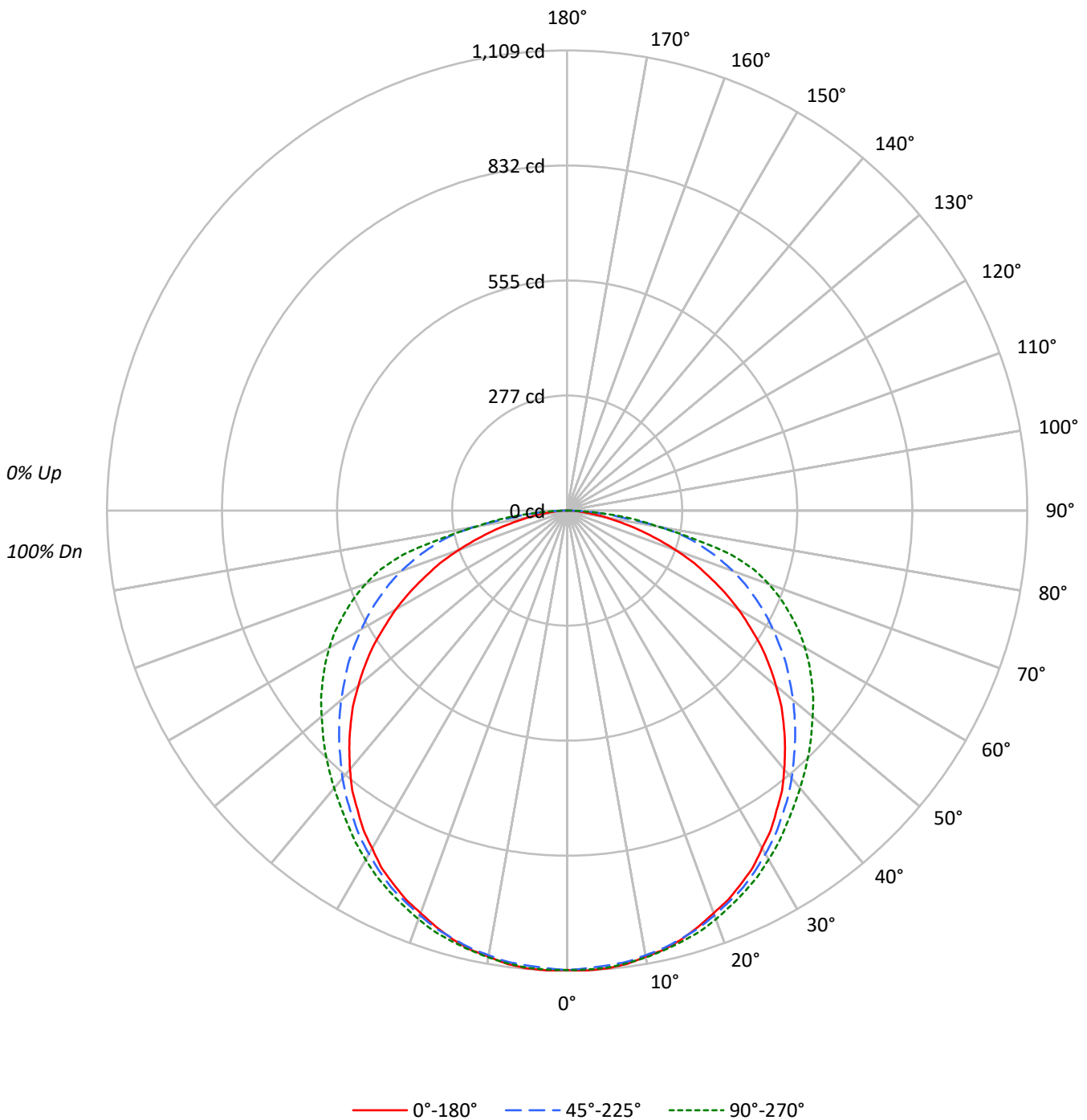
Input Watts (W): 44.268  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	68	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°	1490	1490	1490
5°	1496	1486	1493
10°	1492	1487	1494
15°	1489	1487	1496
20°	1478	1486	1501
25°	1473	1488	1504
30°	1460	1485	1509
35°	1446	1480	1515
40°	1430	1479	1534
45°	1406	1479	1569
50°	1375	1488	1616
55°	1340	1512	1688
60°	1283	1542	1781
65°	1201	1596	1891
70°	1092	1670	2034
75°	926	1762	2125
80°	731	1773	1719
85°	539	1348	1510



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.1	3.0
10°-20°	302.3	8.6
20°-30°	462.3	13.1
30°-40°	565.2	16.0
40°-50°	602.4	17.1
50°-60°	576.0	16.4
60°-70°	487.9	13.9
70°-80°	327.9	9.3
80°-90°	92.5	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°	869.7	24.7
0°-40°	1434.9	40.7
0°-60°	2613.3	74.2
0°-90°	3521.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3521.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1107	1107	1107	1107	1107	
5°	1107	1106	1100	1106	1106	105
15°	1069	1069	1067	1076	1074	301
25°	992	996	1003	1011	1013	457
35°	880	887	901	919	922	552
45°	739	751	777	810	824	570
55°	571	592	645	695	720	509
65°	377	416	501	568	594	375
75°	178	243	339	396	409	191
85°	35	72	87	94	98	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1107.4	1107.4	1107.4	1107.4	1107.4
2.5°	1109.2	1109.2	1104.0	1107.4	1107.4
5°	1107.4	1105.7	1100.5	1105.7	1105.7
7.5°	1102.2	1100.5	1097.0	1102.2	1100.5
10°	1091.7	1091.7	1088.2	1093.5	1093.5
12.5°	1083.0	1081.2	1079.5	1086.5	1084.7
15°	1069.0	1069.0	1067.3	1076.0	1074.3
17.5°	1051.6	1053.3	1055.0	1062.0	1063.8
20°	1032.3	1035.8	1037.6	1048.1	1048.1
22.5°	1014.9	1016.6	1020.1	1030.6	1030.6
25°	992.2	995.7	1002.6	1011.4	1013.1
27.5°	969.5	971.2	979.9	992.2	993.9
30°	939.8	945.0	955.5	969.5	971.2
32.5°	913.6	918.8	931.0	945.0	948.5
35°	880.4	887.4	901.3	918.8	922.3
37.5°	850.7	855.9	873.4	892.6	897.8
40°	814.0	824.5	841.9	864.6	873.4
42.5°	777.3	787.8	808.8	838.4	848.9
45°	738.9	751.1	777.3	810.5	824.5
47.5°	700.5	714.4	744.1	782.5	798.3
50°	656.8	674.3	710.9	754.6	772.1
52.5°	614.9	635.8	676.0	724.9	747.6
55°	571.2	592.2	644.6	695.2	719.7
57.5°	522.3	550.2	607.9	665.5	691.7
60°	476.9	503.1	572.9	635.8	662.0
62.5°	428.0	462.9	538.0	604.4	630.6
65°	377.3	415.7	501.3	567.7	593.9
67.5°	331.9	373.8	464.6	531.0	557.2
70°	277.7	330.1	424.5	490.8	517.0
72.5°	227.1	284.7	382.5	447.2	471.6
75°	178.2	242.8	338.9	396.5	408.7
77.5°	132.8	200.9	293.5	317.9	309.2
80°	94.3	160.7	228.8	216.6	221.8
82.5°	61.1	122.3	141.5	160.7	165.9
85°	34.9	71.6	87.3	94.3	97.8
87.5°	15.7	26.2	34.9	34.9	33.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)