

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: P277263

Luminaire Tested: **22CZ2-44HE-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277263  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44HE-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4282.0 lumens  
Efficiency: N/A  
Efficacy: 120.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

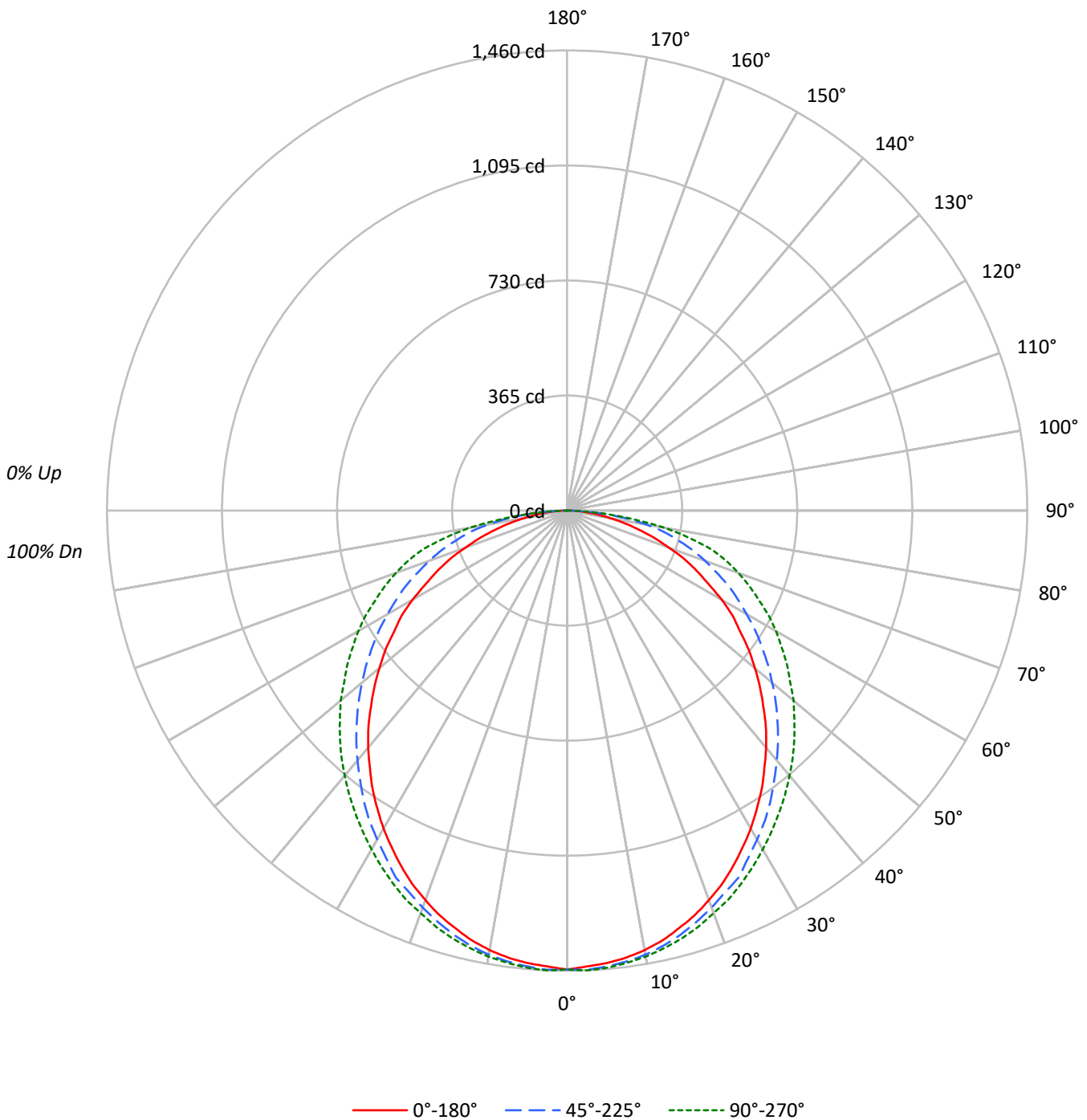
Input Watts (W): 35.526  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	3918	3918	3918
5°	3893	3921	3933
10°	3869	3909	3927
15°	3821	3880	3915
20°	3765	3838	3892
25°	3698	3816	3879
30°	3621	3745	3856
35°	3537	3696	3848
40°	3449	3634	3856
45°	3352	3593	3881
50°	3255	3555	3925
55°	3143	3539	3993
60°	3050	3538	4117
65°	2898	3596	4266
70°	2702	3664	4542
75°	2476	3790	4907
80°	2156	3952	4832
85°	1886	3514	3838



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.7	3.2
10°-20°	392.2	9.2
20°-30°	588.8	13.7
30°-40°	703.5	16.4
40°-50°	731.6	17.1
50°-60°	678.0	15.8
60°-70°	556.1	13.0
70°-80°	376.0	8.8
80°-90°	118.1	2.8
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°	1118.6	26.1
0°-40°	1822.2	42.6
0°-60°	3231.7	75.5
0°-90°	4282.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4282.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1456	1456	1456	1456	1456	
5°	1441	1443	1452	1454	1456	137
15°	1372	1378	1393	1401	1405	387
25°	1245	1256	1285	1300	1306	573
35°	1077	1091	1125	1159	1172	673
45°	881	898	944	999	1020	680
55°	670	691	754	822	851	602
65°	455	480	565	638	670	450
75°	238	278	364	438	472	252
85°	61	84	114	126	124	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1456.0	1456.0	1456.0	1456.0	1456.0
2.5°	1447.5	1451.7	1458.1	1460.2	1460.2
5°	1441.2	1443.3	1451.7	1453.9	1456.0
7.5°	1430.7	1434.9	1443.3	1445.4	1447.5
10°	1415.9	1420.1	1430.7	1434.9	1437.0
12.5°	1397.0	1401.2	1413.8	1420.1	1422.2
15°	1371.7	1378.0	1392.7	1401.2	1405.4
17.5°	1346.4	1352.7	1367.5	1380.1	1384.3
20°	1314.8	1329.5	1340.1	1356.9	1359.0
22.5°	1283.2	1291.6	1310.6	1327.4	1335.9
25°	1245.3	1255.8	1285.3	1300.0	1306.4
27.5°	1205.2	1220.0	1243.1	1266.3	1274.8
30°	1165.2	1175.7	1205.2	1232.6	1241.0
32.5°	1120.9	1135.7	1167.3	1194.7	1207.3
35°	1076.7	1091.4	1125.2	1158.9	1171.5
37.5°	1028.2	1045.1	1078.8	1118.8	1135.7
40°	981.9	994.5	1034.6	1083.0	1097.8
42.5°	933.4	948.2	990.3	1043.0	1059.8
45°	880.7	897.6	944.0	998.7	1019.8
47.5°	830.2	847.0	897.6	952.4	977.7
50°	777.5	798.6	849.1	912.3	937.6
52.5°	726.9	745.9	802.8	868.1	891.3
55°	670.0	691.1	754.3	821.7	851.2
57.5°	623.7	638.4	708.0	777.5	807.0
60°	566.8	585.8	657.4	731.1	764.9
62.5°	505.7	537.3	611.0	686.9	720.6
65°	455.1	480.4	564.7	638.4	670.0
67.5°	402.4	429.8	512.0	590.0	625.8
70°	343.4	379.3	465.7	543.6	577.3
72.5°	290.8	328.7	417.2	493.0	528.9
75°	238.1	278.1	364.5	438.3	472.0
77.5°	187.5	231.8	316.1	372.9	394.0
80°	139.1	181.2	255.0	295.0	311.8
82.5°	96.9	132.7	187.5	208.6	212.8
85°	61.1	84.3	113.8	126.4	124.3
87.5°	27.4	33.7	42.1	46.4	44.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)