

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: P277485

Luminaire Tested: **22CZ2-44HE-S-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277485  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44HE-S-UNV-L92765-W2A1-U-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4076.0 lumens  
Efficiency: N/A  
Efficacy: 114.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

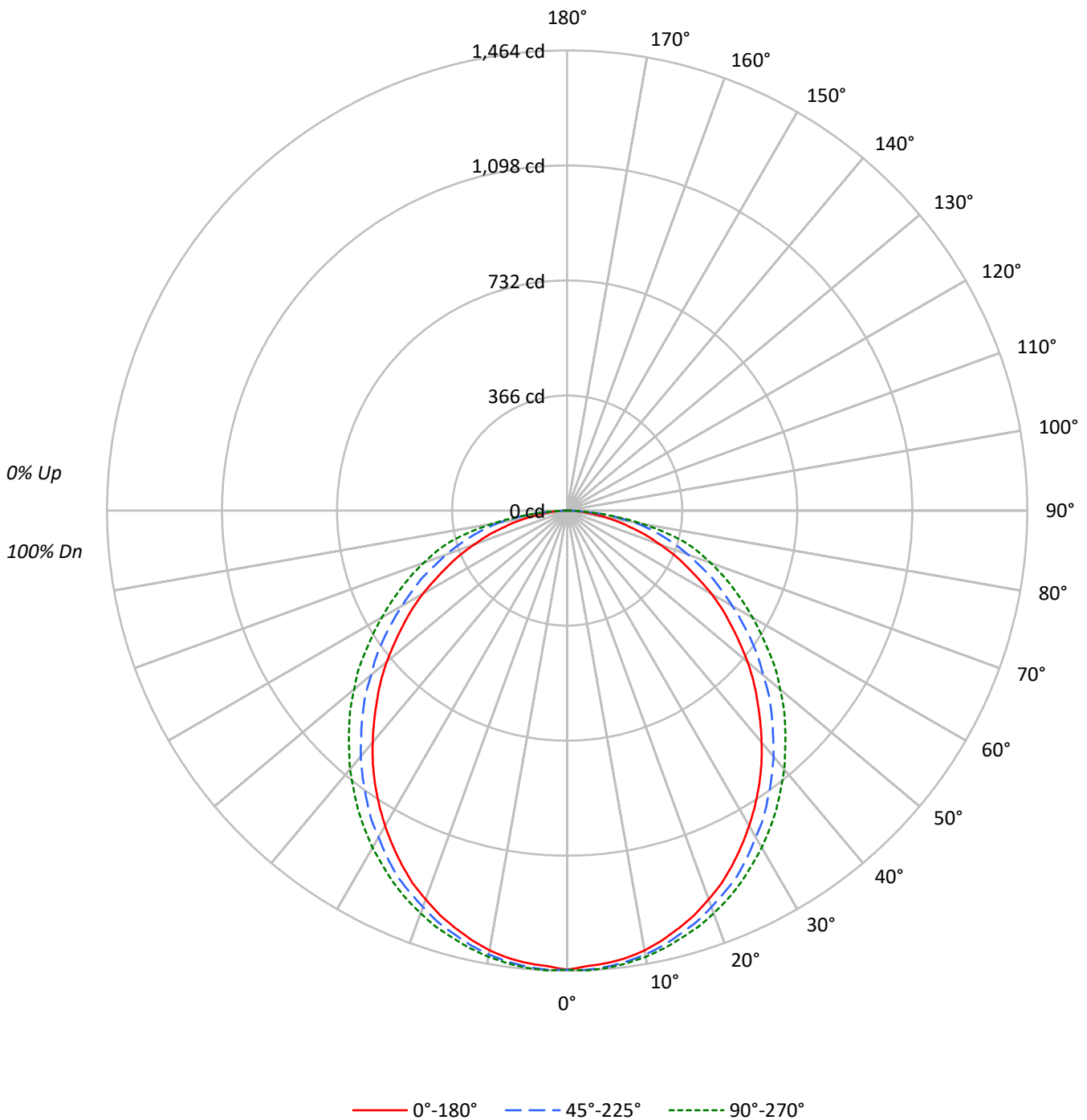
Input Watts (W): 35.526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3930	3930	3930
5°	3904	3935	3945
10°	3882	3918	3939
15°	3831	3884	3921
20°	3769	3845	3905
25°	3693	3806	3879
30°	3599	3729	3847
35°	3499	3661	3811
40°	3380	3587	3775
45°	3257	3503	3734
50°	3137	3408	3702
55°	2989	3346	3676
60°	2856	3265	3664
65°	2664	3245	3705
70°	2454	3217	3816
75°	2215	3263	4014
80°	1915	3360	3772
85°	1584	2819	2819



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.1	3.4
10°-20°	393.1	9.6
20°-30°	588.1	14.4
30°-40°	696.5	17.1
40°-50°	709.8	17.4
50°-60°	636.2	15.6
60°-70°	498.1	12.2
70°-80°	321.2	7.9
80°-90°	94.9	2.3
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°	1119.3	27.5
0°-40°	1815.8	44.5
0°-60°	3161.9	77.6
0°-90°	4076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4076.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1461	1461	1461	1461	1461	
5°	1445	1449	1457	1459	1461	137
15°	1375	1383	1394	1405	1407	388
25°	1244	1255	1282	1299	1306	573
35°	1065	1078	1114	1149	1160	666
45°	856	875	920	968	981	661
55°	637	658	713	763	784	571
65°	418	443	510	559	582	416
75°	213	245	314	367	386	228
85°	51	70	91	91	91	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1460.6	1460.6	1460.6	1460.6	1460.6
2.5°	1451.0	1454.9	1462.5	1464.4	1464.4
5°	1445.3	1449.1	1456.8	1458.7	1460.6
7.5°	1435.8	1437.7	1447.2	1451.0	1453.0
10°	1420.6	1424.4	1433.9	1439.6	1441.5
12.5°	1399.7	1405.4	1416.8	1424.4	1426.3
15°	1375.0	1382.6	1394.0	1405.4	1407.3
17.5°	1348.4	1356.0	1371.2	1384.5	1388.3
20°	1316.0	1325.5	1342.6	1357.9	1363.6
22.5°	1283.7	1291.3	1312.2	1331.2	1336.9
25°	1243.8	1255.2	1281.8	1298.9	1306.5
27.5°	1201.9	1215.2	1241.9	1264.7	1272.3
30°	1158.2	1171.5	1200.0	1228.5	1238.1
32.5°	1112.5	1127.7	1162.0	1190.5	1200.0
35°	1065.0	1078.3	1114.4	1148.7	1160.1
37.5°	1015.5	1027.0	1068.8	1104.9	1116.3
40°	962.3	977.5	1021.2	1063.1	1074.5
42.5°	909.0	926.2	969.9	1015.5	1027.0
45°	855.8	874.8	920.5	968.0	981.3
47.5°	804.4	819.7	871.0	916.7	935.7
50°	749.3	764.5	814.0	865.3	884.3
52.5°	692.2	713.2	766.4	815.9	838.7
55°	637.1	658.0	713.2	762.6	783.5
57.5°	585.7	602.9	659.9	711.3	732.2
60°	530.6	545.8	606.7	661.8	680.8
62.5°	471.6	494.5	557.2	608.6	631.4
65°	418.4	443.1	509.7	559.1	581.9
67.5°	368.9	391.8	456.4	509.7	534.4
70°	311.9	342.3	408.9	462.1	485.0
72.5°	266.2	292.9	361.3	414.6	439.3
75°	213.0	245.3	313.8	367.0	386.1
77.5°	169.3	201.6	266.2	308.1	317.6
80°	123.6	155.9	216.8	237.7	243.4
82.5°	83.7	114.1	155.9	161.7	163.6
85°	51.3	70.4	91.3	91.3	91.3
87.5°	24.7	28.5	32.3	30.4	30.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)