

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: P275895

Luminaire Tested: **24CZ2-30HE-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275895  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3078.0 lumens  
Efficiency: N/A  
Efficacy: 149.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

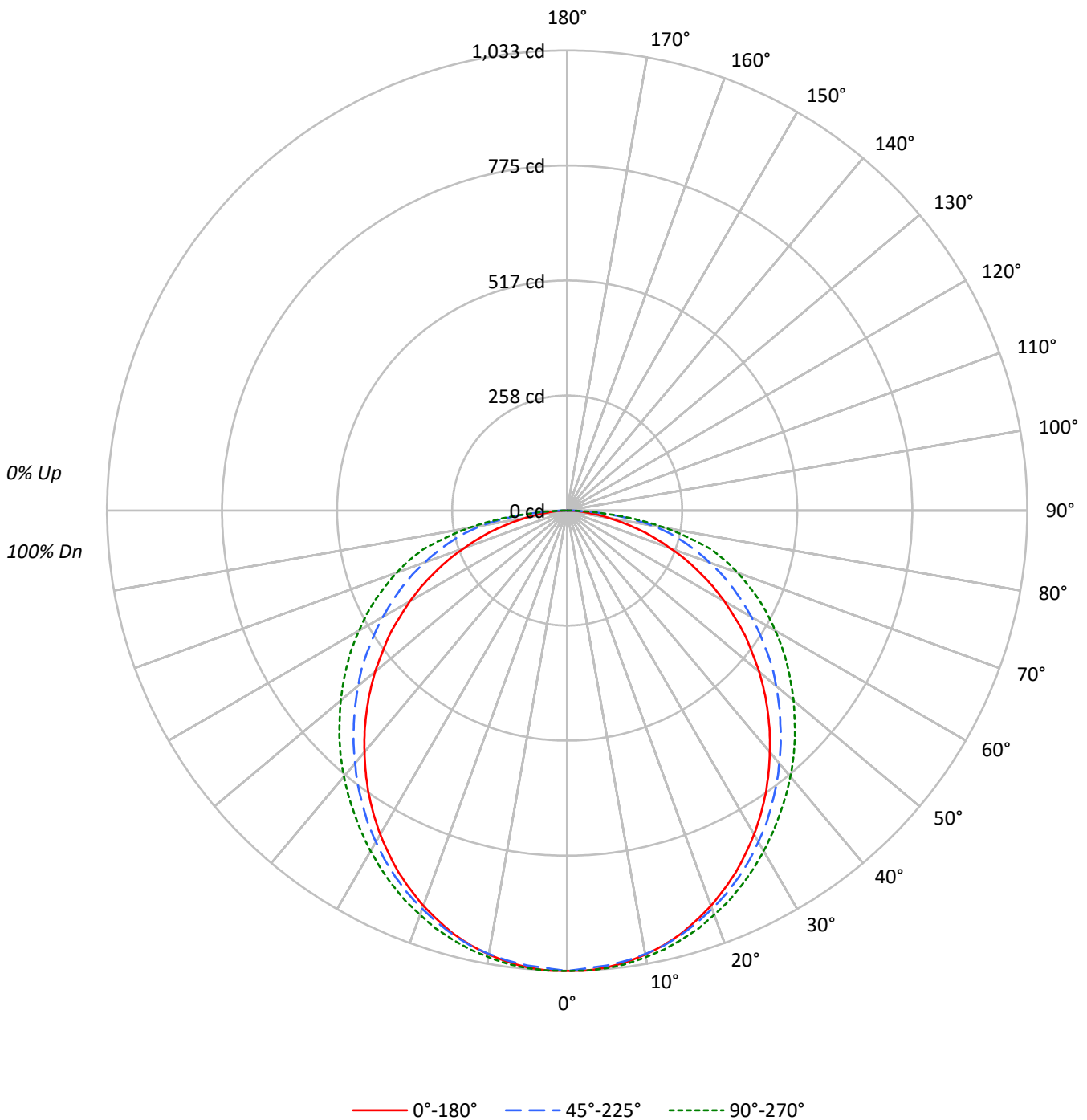
Input Watts (W): 20.553  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	89	86	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	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	1390	1390	1390
5°	1390	1385	1393
10°	1383	1381	1391
15°	1371	1374	1388
20°	1352	1362	1383
25°	1330	1350	1377
30°	1304	1334	1371
35°	1276	1318	1367
40°	1243	1301	1369
45°	1212	1288	1376
50°	1178	1281	1389
55°	1142	1280	1415
60°	1097	1285	1451
65°	1040	1305	1514
70°	966	1338	1600
75°	881	1405	1736
80°	724	1512	1735
85°	556	1396	1491



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.7	3.2
10°-20°	279.0	9.1
20°-30°	419.9	13.6
30°-40°	503.2	16.3
40°-50°	524.4	17.0
50°-60°	487.9	15.9
60°-70°	401.8	13.1
70°-80°	273.7	8.9
80°-90°	90.4	2.9
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°	796.7	25.9
0°-40°	1299.9	42.2
0°-60°	2312.2	75.1
0°-90°	3078.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3078.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1033	1033	1033	1033	1033	
5°	1029	1029	1025	1030	1031	98
15°	984	985	986	995	996	277
25°	896	900	909	924	928	412
35°	777	786	802	824	832	485
45°	637	650	677	711	723	491
55°	487	503	546	589	603	434
65°	327	354	410	458	476	324
75°	170	208	270	318	334	179
85°	36	70	90	97	97	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1033.4	1033.4	1033.4	1033.4	1033.4
2.5°	1033.4	1033.4	1028.3	1033.4	1033.4
5°	1029.3	1029.3	1025.2	1030.3	1031.4
7.5°	1022.1	1023.2	1019.0	1025.2	1026.2
10°	1011.9	1012.9	1010.8	1017.0	1018.0
12.5°	999.5	1000.6	1000.6	1007.7	1008.8
15°	984.1	985.1	986.2	995.4	996.4
17.5°	964.6	967.7	969.7	981.0	983.1
20°	944.1	947.1	951.2	963.6	965.6
22.5°	920.4	924.5	931.7	945.1	948.2
25°	895.8	899.9	909.1	924.5	927.6
27.5°	868.0	874.2	885.5	901.9	906.0
30°	839.3	845.4	858.8	876.3	882.4
32.5°	808.5	816.7	832.1	851.6	857.8
35°	776.6	785.9	802.3	823.9	832.1
37.5°	742.7	753.0	772.5	796.1	806.4
40°	707.8	720.1	740.7	768.4	779.7
42.5°	672.9	684.2	709.8	739.6	752.0
45°	636.9	650.3	677.0	710.9	723.2
47.5°	599.9	613.3	645.1	681.1	692.4
50°	562.9	576.3	612.2	650.3	663.6
52.5°	522.9	540.3	581.4	619.4	632.8
55°	486.9	503.4	545.5	588.6	603.0
57.5°	445.8	465.4	511.6	556.8	572.2
60°	407.8	428.4	477.7	523.9	539.3
62.5°	368.8	391.4	443.8	491.0	508.5
65°	326.7	354.4	409.9	458.2	475.6
67.5°	288.7	317.4	376.0	425.3	440.7
70°	245.5	280.4	340.0	389.3	406.8
72.5°	208.5	243.5	306.1	354.4	371.9
75°	169.5	207.5	270.2	318.5	333.9
77.5°	130.5	172.6	235.2	272.2	277.4
80°	93.5	137.7	195.2	216.8	223.9
82.5°	65.7	105.8	143.8	158.2	162.3
85°	36.0	69.9	90.4	96.6	96.6
87.5°	15.4	29.8	36.0	37.0	38.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)