

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: P275974

Luminaire Tested: **24CZ2-35HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275974
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: 24CZ2-35HE-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3056.0 lumens
Efficiency: N/A
Efficacy: 123.2 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

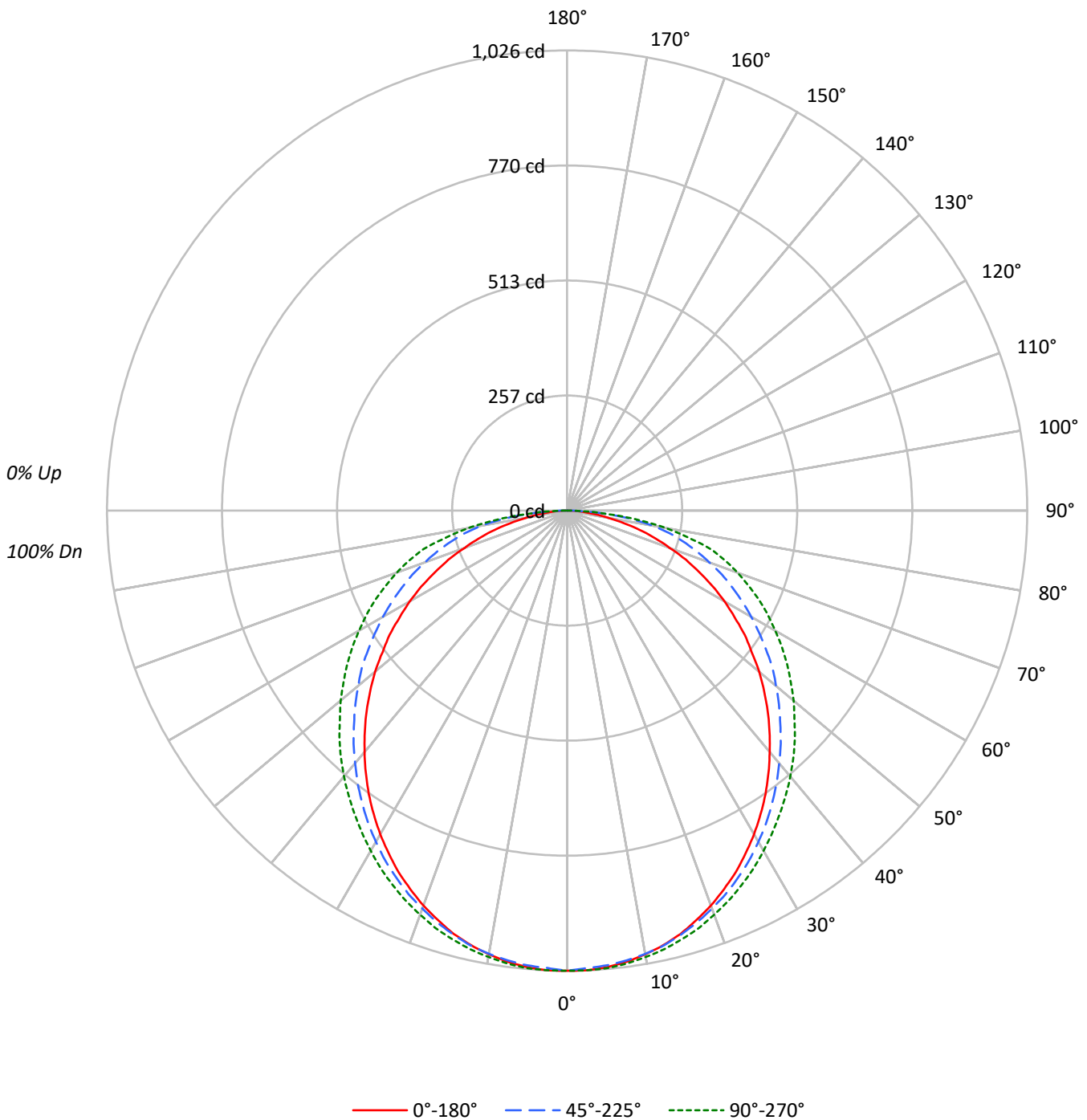
Input Watts (W): 24.80868
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1380	1380	1380
5°	1380	1375	1383
10°	1373	1371	1381
15°	1361	1364	1378
20°	1342	1352	1373
25°	1320	1340	1367
30°	1295	1325	1361
35°	1267	1308	1357
40°	1234	1292	1360
45°	1203	1279	1366
50°	1170	1272	1379
55°	1134	1270	1404
60°	1090	1276	1441
65°	1032	1295	1503
70°	959	1328	1589
75°	875	1394	1723
80°	719	1502	1722
85°	551	1386	1480



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.0	3.2
10°-20°	277.0	9.1
20°-30°	416.9	13.6
30°-40°	499.6	16.3
40°-50°	520.6	17.0
50°-60°	484.4	15.9
60°-70°	399.0	13.1
70°-80°	271.7	8.9
80°-90°	89.7	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°	791.0	25.9
0°-40°	1290.6	42.2
0°-60°	2295.6	75.1
0°-90°	3056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3056.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1022	1022	1018	1023	1024	97
15°	977	978	979	988	989	275
25°	889	894	903	918	921	409
35°	771	780	797	818	826	482
45°	632	646	672	706	718	488
55°	483	500	542	584	599	431
65°	324	352	407	455	472	322
75°	168	206	268	316	332	177
85°	36	69	90	96	96	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1026.0	1026.0	1026.0	1026.0	1026.0
2.5°	1026.0	1026.0	1020.9	1026.0	1026.0
5°	1022.0	1022.0	1017.9	1023.0	1024.0
7.5°	1014.8	1015.8	1011.8	1017.9	1018.9
10°	1004.6	1005.6	1003.6	1009.7	1010.7
12.5°	992.4	993.4	993.4	1000.5	1001.6
15°	977.1	978.1	979.1	988.3	989.3
17.5°	957.7	960.8	962.8	974.0	976.1
20°	937.3	940.4	944.4	956.7	958.7
22.5°	913.8	917.9	925.1	938.3	941.4
25°	889.4	893.5	902.6	917.9	921.0
27.5°	861.8	868.0	879.2	895.5	899.6
30°	833.3	839.4	852.7	870.0	876.1
32.5°	802.7	810.8	826.1	845.5	851.6
35°	771.1	780.2	796.6	818.0	826.1
37.5°	737.4	747.6	767.0	790.4	800.6
40°	702.7	715.0	735.4	762.9	774.1
42.5°	668.0	679.3	704.8	734.3	746.6
45°	632.4	645.6	672.1	705.8	718.0
47.5°	595.6	608.9	640.5	676.2	687.4
50°	558.9	572.2	607.9	645.6	658.9
52.5°	519.1	536.5	577.3	615.0	628.3
55°	483.4	499.8	541.6	584.4	598.7
57.5°	442.6	462.0	507.9	552.8	568.1
60°	404.9	425.3	474.3	520.2	535.5
62.5°	366.2	388.6	440.6	487.5	504.9
65°	324.3	351.9	406.9	454.9	472.2
67.5°	286.6	315.2	373.3	422.2	437.5
70°	243.8	278.4	337.6	386.6	403.9
72.5°	207.0	241.7	303.9	351.9	369.2
75°	168.3	206.0	268.2	316.2	331.5
77.5°	129.5	171.3	233.6	270.3	275.4
80°	92.8	136.7	193.8	215.2	222.3
82.5°	65.3	105.1	142.8	157.1	161.1
85°	35.7	69.4	89.8	95.9	95.9
87.5°	15.3	29.6	35.7	36.7	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)