

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: P276024

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276024
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: 24CZ2-35-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3089.0 lumens
Efficiency: N/A
Efficacy: 115.6 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

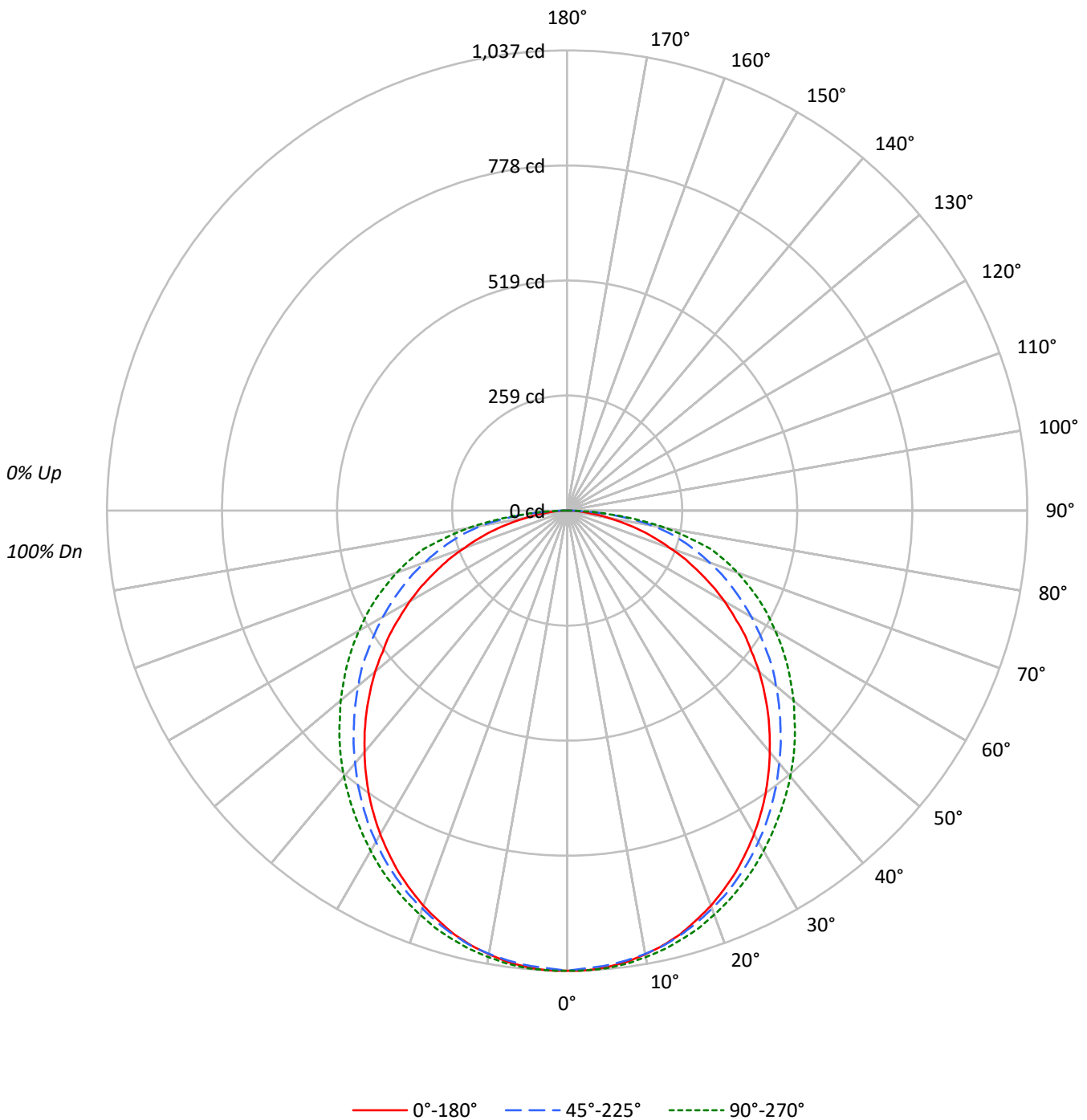
Input Watts (W): 26.71704
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1395	1395	1395
5°	1395	1390	1398
10°	1387	1386	1396
15°	1376	1379	1393
20°	1357	1367	1388
25°	1335	1355	1382
30°	1309	1339	1376
35°	1280	1323	1372
40°	1248	1306	1374
45°	1216	1293	1381
50°	1183	1286	1394
55°	1146	1284	1420
60°	1101	1290	1456
65°	1044	1309	1520
70°	969	1342	1606
75°	884	1409	1742
80°	727	1518	1741
85°	557	1400	1496



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	3.2
10°-20°	280.0	9.1
20°-30°	421.4	13.6
30°-40°	505.0	16.3
40°-50°	526.3	17.0
50°-60°	489.6	15.9
60°-70°	403.3	13.1
70°-80°	274.6	8.9
80°-90°	90.7	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°	799.5	25.9
0°-40°	1304.5	42.2
0°-60°	2320.4	75.1
0°-90°	3089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3089.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	1033	1033	1029	1034	1035	98
15°	988	989	990	999	1000	278
25°	899	903	912	928	931	414
35°	779	789	805	827	835	487
45°	639	653	679	713	726	493
55°	489	505	547	591	605	436
65°	328	356	411	460	477	325
75°	170	208	271	320	335	179
85°	36	70	91	97	97	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1037.1	1037.1	1037.1	1037.1	1037.1
2.5°	1037.1	1037.1	1032.0	1037.1	1037.1
5°	1033.0	1033.0	1028.9	1034.0	1035.1
7.5°	1025.8	1026.8	1022.7	1028.9	1029.9
10°	1015.5	1016.5	1014.4	1020.6	1021.7
12.5°	1003.1	1004.1	1004.1	1011.3	1012.4
15°	987.6	988.7	989.7	999.0	1000.0
17.5°	968.0	971.1	973.2	984.5	986.6
20°	947.4	950.5	954.6	967.0	969.1
22.5°	923.7	927.8	935.1	948.5	951.6
25°	899.0	903.1	912.4	927.8	930.9
27.5°	871.1	877.3	888.7	905.2	909.3
30°	842.3	848.5	861.9	879.4	885.6
32.5°	811.3	819.6	835.1	854.6	860.8
35°	779.4	788.7	805.2	826.8	835.1
37.5°	745.4	755.7	775.3	799.0	809.3
40°	710.3	722.7	743.3	771.1	782.5
42.5°	675.3	686.6	712.4	742.3	754.6
45°	639.2	652.6	679.4	713.4	725.8
47.5°	602.1	615.5	647.4	683.5	694.9
50°	565.0	578.4	614.4	652.6	666.0
52.5°	524.7	542.3	583.5	621.7	635.1
55°	488.7	505.2	547.4	590.7	605.2
57.5°	447.4	467.0	513.4	558.8	574.2
60°	409.3	429.9	479.4	525.8	541.2
62.5°	370.1	392.8	445.4	492.8	510.3
65°	327.8	355.7	411.3	459.8	477.3
67.5°	289.7	318.6	377.3	426.8	442.3
70°	246.4	281.4	341.2	390.7	408.3
72.5°	209.3	244.3	307.2	355.7	373.2
75°	170.1	208.2	271.1	319.6	335.1
77.5°	130.9	173.2	236.1	273.2	278.4
80°	93.8	138.1	195.9	217.5	224.7
82.5°	66.0	106.2	144.3	158.8	162.9
85°	36.1	70.1	90.7	96.9	96.9
87.5°	15.5	29.9	36.1	37.1	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)