

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: P276606

Luminaire Tested: **24CZ2-35HE-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P276606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35HE-S-UNV-L92765-W2A1-U-2700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2741.4 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

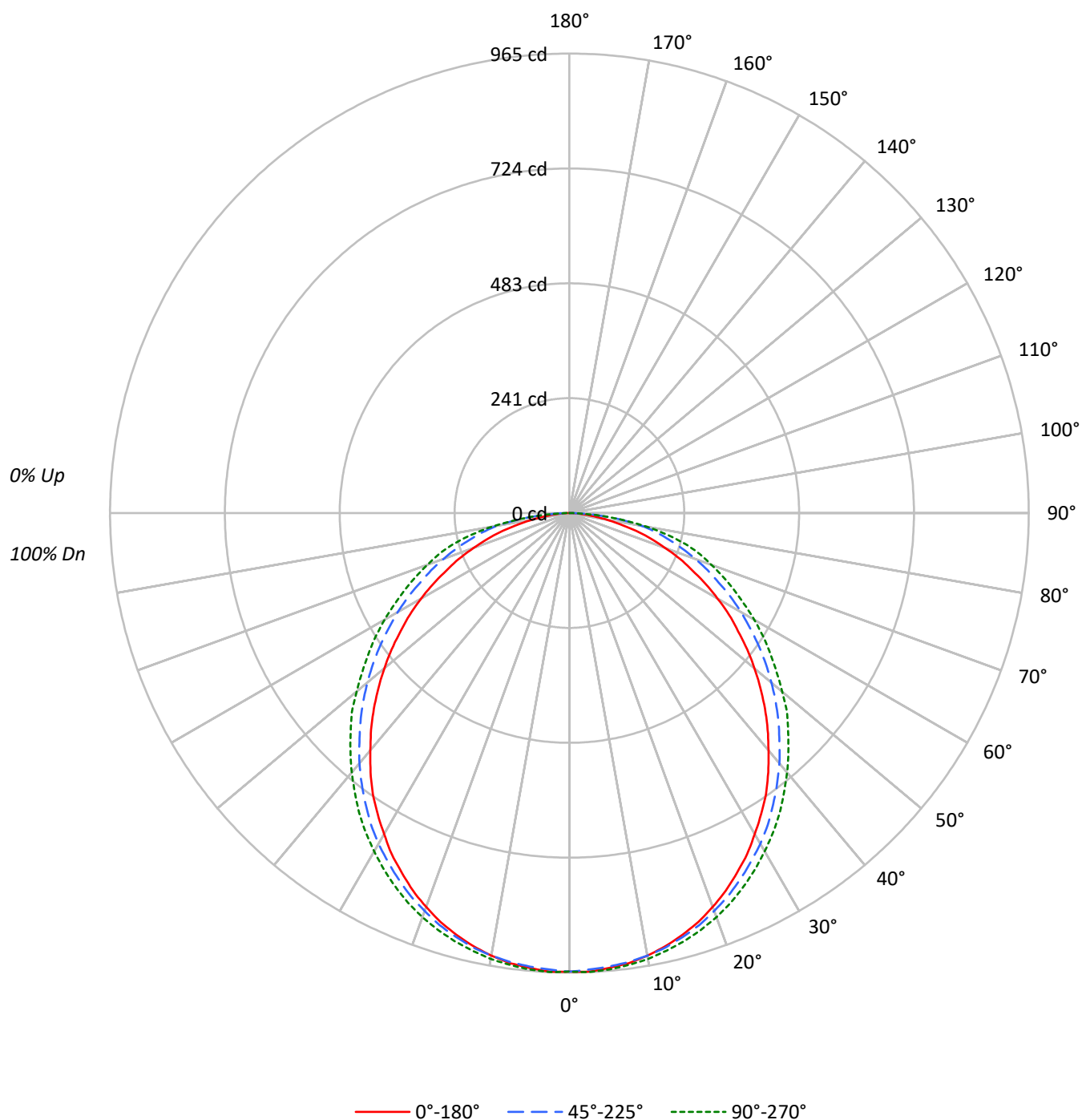
Input Watts (W): 24.087
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	103	99	95	106	101	97	93		97	93	90		93	90	88		89	87	85
2	98	90	83	77	96	88	81	76		84	79	74		81	76	72		78	74	71
3	89	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	70	61	54	80	68	60	54		66	59	53		63	57	52		61	56	51
5	75	62	53	46	73	61	53	46		59	51	46		57	50	45		55	49	45
6	70	56	47	40	68	55	47	40		53	46	40		52	45	40		50	44	39
7	64	51	42	36	63	50	42	36		48	41	35		47	40	35		46	39	35
8	60	46	38	32	58	46	37	32		44	37	32		43	36	31		42	36	31
9	56	43	34	29	55	42	34	29		41	34	28		40	33	28		39	33	28
10	53	39	31	26	51	39	31	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1296	1296	1296
5°	1295	1291	1300
10°	1290	1290	1299
15°	1277	1283	1297
20°	1261	1273	1293
25°	1237	1260	1285
30°	1210	1246	1274
35°	1183	1226	1264
40°	1143	1205	1250
45°	1105	1181	1236
50°	1063	1159	1221
55°	1015	1138	1209
60°	968	1120	1207
65°	906	1101	1214
70°	839	1107	1247
75°	751	1127	1317
80°	607	1194	1289
85°	457	1048	1022



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	3.3
10°-20°	260.5	9.5
20°-30°	391.6	14.3
30°-40°	466.5	17.0
40°-50°	477.4	17.4
50°-60°	429.8	15.7
60°-70°	337.6	12.3
70°-80°	219.1	8.0
80°-90°	67.8	2.5
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°	743.3	27.1
0°-40°	1209.8	44.1
0°-60°	2117.1	77.2
0°-90°	2741.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2741.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	959	960	956	961	962	91
15°	917	920	921	929	931	259
25°	833	840	849	863	866	384
35°	720	729	746	764	770	449
45°	581	595	621	644	650	448
55°	433	452	485	510	516	388
65°	285	306	346	374	381	283
75°	144	172	217	246	253	153
85°	30	55	68	66	66	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	963.1	963.1	963.1	963.1	963.1
2.5°	964.0	964.0	959.6	964.0	964.8
5°	958.7	960.5	956.1	961.3	962.2
7.5°	953.5	953.5	950.9	956.1	957.0
10°	943.9	944.8	943.9	950.0	950.9
12.5°	931.7	933.5	934.3	940.4	941.3
15°	916.9	919.5	921.3	929.1	930.9
17.5°	900.4	903.0	907.4	916.1	917.8
20°	880.4	883.8	889.1	900.4	903.0
22.5°	858.6	862.1	870.8	881.2	885.6
25°	833.3	840.3	849.0	862.9	865.6
27.5°	808.1	814.2	825.5	840.3	843.8
30°	778.5	788.1	802.0	816.8	820.3
32.5°	749.7	759.3	775.9	791.5	795.9
35°	720.1	728.8	746.3	764.5	769.8
37.5°	686.2	697.5	716.7	734.9	740.2
40°	650.5	664.4	686.2	705.3	711.4
42.5°	616.5	631.3	653.1	674.0	681.0
45°	580.8	594.7	620.9	644.4	649.6
47.5°	544.2	559.9	587.8	611.3	620.0
50°	507.7	524.2	553.8	578.2	583.4
52.5°	471.1	488.5	519.9	546.0	548.6
55°	432.8	451.9	485.0	510.3	515.5
57.5°	397.9	414.5	450.2	476.3	482.4
60°	359.6	377.9	416.2	440.6	448.5
62.5°	323.1	342.2	382.3	406.7	413.6
65°	284.7	306.5	345.7	374.4	381.4
67.5°	251.7	272.6	314.4	342.2	349.2
70°	213.3	236.9	281.3	310.0	317.0
72.5°	180.3	204.6	249.0	276.9	287.4
75°	144.5	172.4	216.8	246.4	253.4
77.5°	109.7	141.9	187.2	209.9	209.9
80°	78.4	112.3	154.1	164.6	166.3
82.5°	51.4	84.5	114.1	113.2	113.2
85°	29.6	54.9	67.9	66.2	66.2
87.5°	11.3	22.6	24.4	24.4	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)