

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: P276189

Luminaire Tested: **24CZ2-35HE-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276189
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-L92765-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: 2940.2 lumens
Efficiency: N/A
Efficacy: 120.2 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

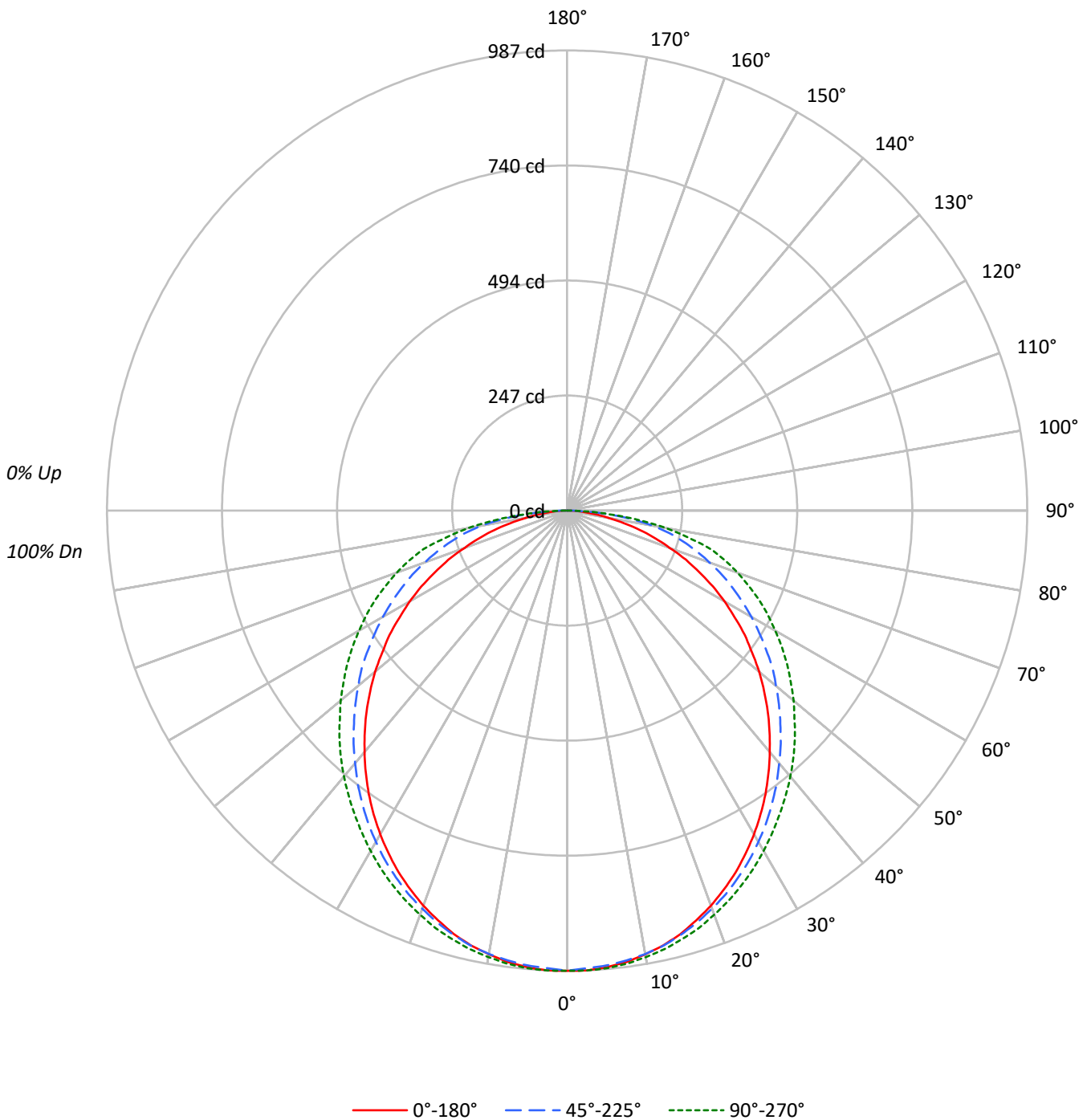
Input Watts (W): 24.459
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1328	1328	1328
5°	1328	1323	1331
10°	1320	1319	1329
15°	1310	1312	1326
20°	1291	1301	1321
25°	1270	1289	1315
30°	1246	1274	1310
35°	1218	1259	1305
40°	1188	1243	1308
45°	1158	1231	1314
50°	1126	1224	1327
55°	1091	1222	1351
60°	1048	1228	1386
65°	993	1246	1446
70°	923	1278	1529
75°	842	1342	1658
80°	692	1444	1657
85°	530	1334	1423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.4	3.2
10°-20°	266.5	9.1
20°-30°	401.1	13.6
30°-40°	480.7	16.3
40°-50°	500.9	17.0
50°-60°	466.0	15.9
60°-70°	383.8	13.1
70°-80°	261.4	8.9
80°-90°	86.3	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°	761.0	25.9
0°-40°	1241.7	42.2
0°-60°	2208.6	75.1
0°-90°	2940.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2940.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	983	983	979	984	985	93
15°	940	941	942	951	952	265
25°	856	860	868	883	886	394
35°	742	751	766	787	795	464
45°	608	621	647	679	691	469
55°	465	481	521	562	576	415
65°	312	338	392	438	454	310
75°	162	198	258	304	319	171
85°	34	67	86	92	92	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	987.2	987.2	987.2	987.2	987.2
2.5°	987.2	987.2	982.2	987.2	987.2
5°	983.2	983.2	979.3	984.2	985.2
7.5°	976.4	977.3	973.4	979.3	980.3
10°	966.5	967.5	965.6	971.5	972.4
12.5°	954.8	955.8	955.8	962.6	963.6
15°	940.1	941.0	942.0	950.8	951.8
17.5°	921.4	924.4	926.3	937.1	939.1
20°	901.8	904.7	908.7	920.4	922.4
22.5°	879.2	883.1	890.0	902.8	905.7
25°	855.7	859.6	868.4	883.1	886.1
27.5°	829.2	835.1	845.8	861.5	865.5
30°	801.7	807.6	820.3	837.0	842.9
32.5°	772.3	780.1	794.8	813.5	819.4
35°	741.8	750.7	766.4	787.0	794.8
37.5°	709.5	719.3	737.9	760.5	770.3
40°	676.1	687.9	707.5	734.0	744.8
42.5°	642.7	653.5	678.1	706.5	718.3
45°	608.4	621.1	646.7	679.0	690.8
47.5°	573.1	585.8	616.2	650.6	661.4
50°	537.7	550.5	584.8	621.1	633.9
52.5°	499.5	516.1	555.4	591.7	604.5
55°	465.1	480.8	521.1	562.3	576.0
57.5°	425.9	444.5	488.7	531.8	546.6
60°	389.6	409.2	456.3	500.4	515.2
62.5°	352.3	373.9	423.9	469.0	485.7
65°	312.0	338.5	391.5	437.6	454.3
67.5°	275.7	303.2	359.1	406.2	421.0
70°	234.5	267.9	324.8	371.9	388.6
72.5°	199.2	232.6	292.4	338.5	355.2
75°	161.9	198.2	258.1	304.2	318.9
77.5°	124.6	164.9	224.7	260.0	264.9
80°	89.3	131.5	186.4	207.0	213.9
82.5°	62.8	101.1	137.4	151.1	155.0
85°	34.3	66.7	86.4	92.2	92.2
87.5°	14.7	28.5	34.3	35.3	36.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)