

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: P276473

Luminaire Tested: **24CZ2-35HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276473
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-L82765-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3416.4 lumens
Efficiency: N/A
Efficacy: 140.7 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

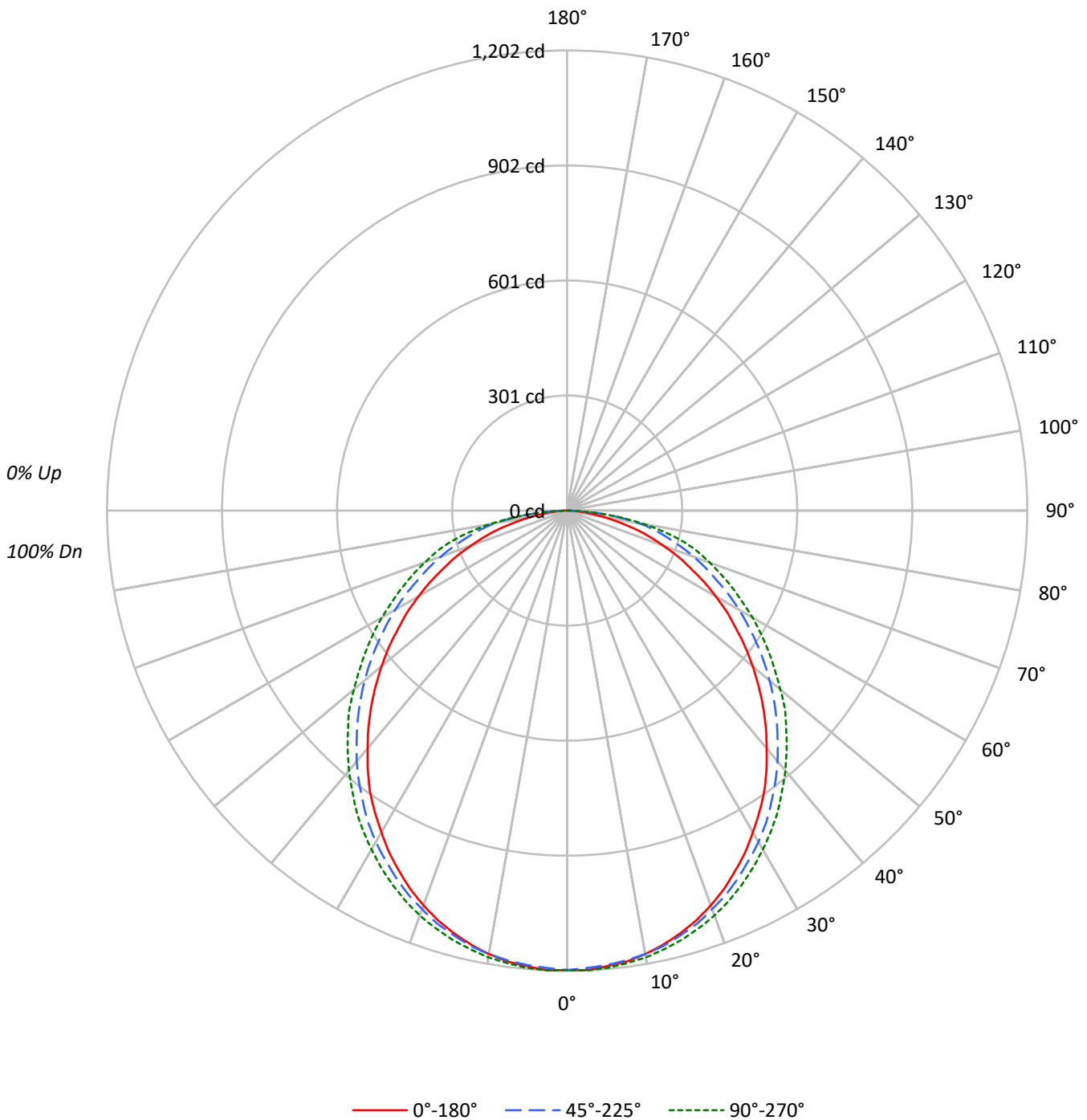
Input Watts (W): 24.273
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1615	1615	1615
5°	1614	1609	1620
10°	1607	1607	1619
15°	1592	1599	1616
20°	1571	1586	1611
25°	1542	1571	1601
30°	1507	1553	1588
35°	1474	1528	1576
40°	1424	1502	1557
45°	1377	1472	1540
50°	1324	1445	1522
55°	1265	1418	1507
60°	1206	1396	1504
65°	1130	1372	1513
70°	1046	1379	1554
75°	936	1405	1642
80°	757	1488	1606
85°	570	1306	1274



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	3.3
10°-20°	324.7	9.5
20°-30°	488.0	14.3
30°-40°	581.3	17.0
40°-50°	595.0	17.4
50°-60°	535.6	15.7
60°-70°	420.7	12.3
70°-80°	273.0	8.0
80°-90°	84.4	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°	926.3	27.1
0°-40°	1507.7	44.1
0°-60°	2638.3	77.2
0°-90°	3416.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3416.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1195	1197	1192	1198	1199	114
15°	1143	1146	1148	1158	1160	322
25°	1038	1047	1058	1075	1079	478
35°	897	908	930	953	959	560
45°	724	741	774	803	810	558
55°	539	563	604	636	642	483
65°	355	382	431	467	475	353
75°	180	215	270	307	316	191
85°	37	68	85	82	82	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1200.2	1200.2	1200.2	1200.2	1200.2
2.5°	1201.3	1201.3	1195.8	1201.3	1202.4
5°	1194.8	1196.9	1191.5	1198.0	1199.1
7.5°	1188.3	1188.3	1185.0	1191.5	1192.6
10°	1176.3	1177.4	1176.3	1183.9	1185.0
12.5°	1161.1	1163.3	1164.4	1172.0	1173.1
15°	1142.7	1145.9	1148.1	1157.9	1160.0
17.5°	1122.1	1125.3	1130.7	1141.6	1143.8
20°	1097.1	1101.4	1108.0	1122.1	1125.3
22.5°	1070.0	1074.3	1085.2	1098.2	1103.6
25°	1038.5	1047.2	1058.0	1075.4	1078.7
27.5°	1007.0	1014.6	1028.7	1047.2	1051.5
30°	970.1	982.1	999.4	1017.9	1022.2
32.5°	934.3	946.3	966.9	986.4	991.8
35°	897.4	908.3	930.0	952.8	959.3
37.5°	855.1	869.2	893.1	915.9	922.4
40°	810.6	828.0	855.1	879.0	886.6
42.5°	768.3	786.7	813.9	839.9	848.6
45°	723.8	741.2	773.7	803.0	809.5
47.5°	678.2	697.8	732.5	761.8	772.6
50°	632.6	653.3	690.2	720.5	727.1
52.5°	587.1	608.8	647.8	680.4	683.7
55°	539.3	563.2	604.4	635.9	642.4
57.5°	495.9	516.5	561.0	593.6	601.2
60°	448.2	471.0	518.7	549.1	558.9
62.5°	402.6	426.5	476.4	506.8	515.5
65°	354.8	382.0	430.8	466.6	475.3
67.5°	313.6	339.7	391.7	426.5	435.1
70°	265.9	295.2	350.5	386.3	395.0
72.5°	224.6	255.0	310.4	345.1	358.1
75°	180.1	214.9	270.2	307.1	315.8
77.5°	136.7	176.9	233.3	261.5	261.5
80°	97.7	140.0	192.1	205.1	207.3
82.5°	64.0	105.3	142.2	141.1	141.1
85°	36.9	68.4	84.6	82.5	82.5
87.5°	14.1	28.2	30.4	30.4	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)