

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: P276322

Luminaire Tested: **24CZ2-40HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276322
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: 24CZ2-40HE-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3826.0 lumens
Efficiency: N/A
Efficacy: 135.6 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

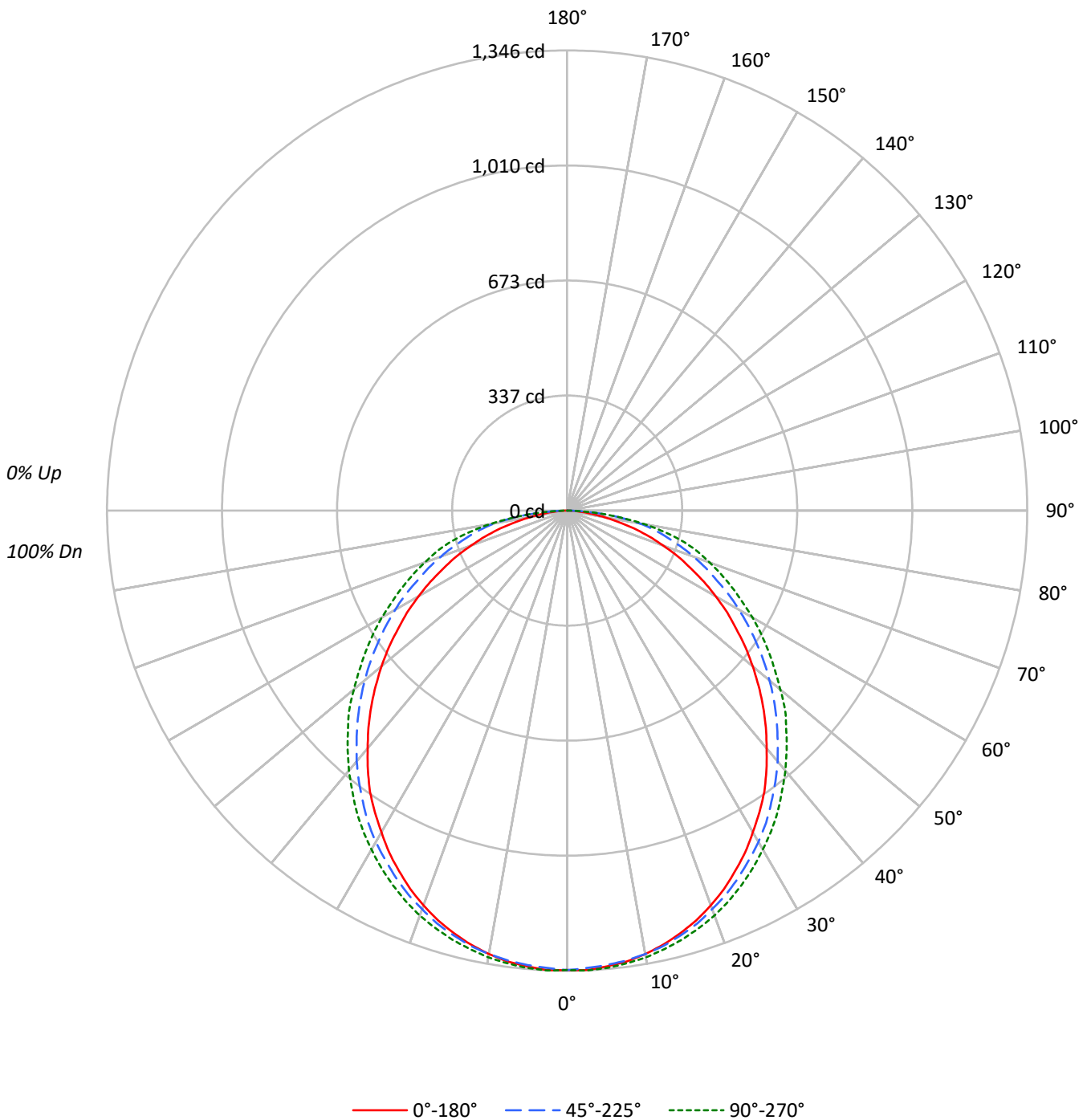
Input Watts (W): 28.215456
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1807	1802	1814
10°	1800	1800	1813
15°	1783	1791	1810
20°	1759	1777	1804
25°	1727	1759	1793
30°	1688	1739	1779
35°	1651	1711	1765
40°	1594	1682	1744
45°	1542	1649	1725
50°	1483	1618	1704
55°	1417	1588	1688
60°	1351	1563	1684
65°	1265	1536	1695
70°	1171	1544	1740
75°	1049	1573	1838
80°	848	1667	1798
85°	638	1463	1426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	3.3
10°-20°	363.6	9.5
20°-30°	546.6	14.3
30°-40°	651.0	17.0
40°-50°	666.3	17.4
50°-60°	599.9	15.7
60°-70°	471.1	12.3
70°-80°	305.7	8.0
80°-90°	94.6	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°	1037.4	27.1
0°-40°	1688.4	44.1
0°-60°	2954.6	77.2
0°-90°	3826.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3826.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1344	1344	1344	1344	1344	
5°	1338	1340	1334	1342	1343	127
15°	1280	1283	1286	1297	1299	361
25°	1163	1173	1185	1204	1208	536
35°	1005	1017	1042	1067	1074	627
45°	811	830	866	899	907	625
55°	604	631	677	712	719	541
65°	397	428	482	523	532	396
75°	202	241	303	344	354	213
85°	41	77	95	92	92	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1344.1	1344.1	1344.1	1344.1	1344.1
2.5°	1345.3	1345.3	1339.2	1345.3	1346.5
5°	1338.0	1340.5	1334.4	1341.7	1342.9
7.5°	1330.7	1330.7	1327.1	1334.4	1335.6
10°	1317.4	1318.6	1317.4	1325.9	1327.1
12.5°	1300.3	1302.8	1304.0	1312.5	1313.7
15°	1279.7	1283.3	1285.8	1296.7	1299.1
17.5°	1256.6	1260.2	1266.3	1278.5	1280.9
20°	1228.6	1233.5	1240.8	1256.6	1260.2
22.5°	1198.3	1203.1	1215.3	1229.9	1235.9
25°	1163.0	1172.7	1184.9	1204.3	1208.0
27.5°	1127.8	1136.3	1152.1	1172.7	1177.6
30°	1086.5	1099.8	1119.3	1139.9	1144.8
32.5°	1046.4	1059.7	1082.8	1104.7	1110.8
35°	1005.0	1017.2	1041.5	1067.0	1074.3
37.5°	957.6	973.4	1000.2	1025.7	1033.0
40°	907.8	927.3	957.6	984.4	992.9
42.5°	860.4	881.1	911.5	940.6	950.3
45°	810.6	830.0	866.5	899.3	906.6
47.5°	759.5	781.4	820.3	853.1	865.3
50°	708.5	731.6	772.9	806.9	814.2
52.5°	657.5	681.8	725.5	762.0	765.6
55°	604.0	630.7	676.9	712.2	719.4
57.5°	555.4	578.5	628.3	664.8	673.3
60°	501.9	527.4	580.9	614.9	625.9
62.5°	450.9	477.6	533.5	567.5	577.3
65°	397.4	427.8	482.5	522.6	532.3
67.5°	351.2	380.4	438.7	477.6	487.3
70°	297.7	330.6	392.5	432.6	442.4
72.5°	251.6	285.6	347.6	386.5	401.0
75°	201.7	240.6	302.6	343.9	353.6
77.5°	153.1	198.1	261.3	292.9	292.9
80°	109.4	156.8	215.1	229.7	232.1
82.5°	71.7	117.9	159.2	158.0	158.0
85°	41.3	76.6	94.8	92.4	92.4
87.5°	15.8	31.6	34.0	34.0	32.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)