

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: P277065

Luminaire Tested: **24CZ2-55HE-RDP-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277065  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55HE-RDP-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3118.9 lumens  
Efficiency: N/A  
Efficacy: 76.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

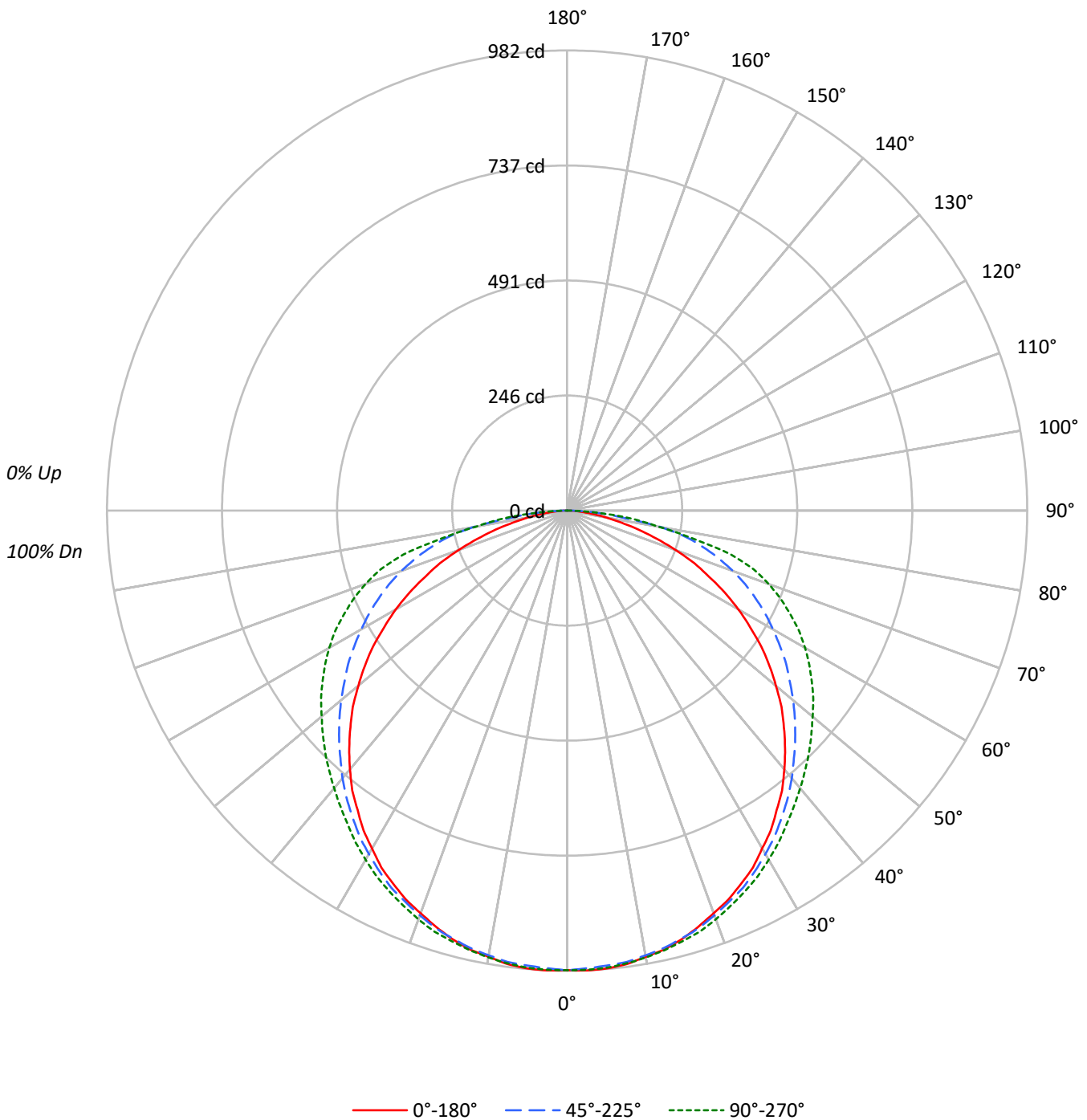
Input Watts (W): 40.548  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P277065

CATALOG NUMBER: 24CZ2-55HE-RDP-UNV-L92765-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P277065

CATALOG NUMBER: 24CZ2-55HE-RDP-UNV-L92765-W2A1-U-4000K

**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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1320	1320	1320
5°	1325	1316	1323
10°	1321	1317	1323
15°	1319	1317	1325
20°	1309	1316	1329
25°	1305	1318	1332
30°	1293	1315	1336
35°	1281	1311	1342
40°	1266	1310	1359
45°	1245	1310	1389
50°	1218	1318	1431
55°	1187	1339	1495
60°	1136	1365	1578
65°	1064	1414	1675
70°	968	1479	1801
75°	820	1560	1882
80°	647	1571	1523
85°	477	1193	1337



TEST NUMBER: P277065

CATALOG NUMBER: 24CZ2-55HE-RDP-UNV-L92765-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.0	3.0
10°-20°	267.8	8.6
20°-30°	409.5	13.1
30°-40°	500.6	16.0
40°-50°	533.5	17.1
50°-60°	510.1	16.4
60°-70°	432.1	13.9
70°-80°	290.4	9.3
80°-90°	81.9	2.6
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°	770.3	24.7
0°-40°	1270.8	40.7
0°-60°	2314.4	74.2
0°-90°	3118.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3118.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	981	979	975	979	979	93
15°	947	947	945	953	951	267
25°	879	882	888	896	897	405
35°	780	786	798	814	817	488
45°	654	665	688	718	730	505
55°	506	524	571	616	637	451
65°	334	368	444	503	526	332
75°	158	215	300	351	362	169
85°	31	63	77	84	87	38
90°	0	0	0	0	0	



TEST NUMBER: P277065

CATALOG NUMBER: 24CZ2-55HE-RDP-UNV-L92765-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	980.8	980.8	980.8	980.8	980.8
2.5°	982.3	982.3	977.7	980.8	980.8
5°	980.8	979.2	974.6	979.2	979.2
7.5°	976.2	974.6	971.5	976.2	974.6
10°	966.9	966.9	963.8	968.4	968.4
12.5°	959.1	957.6	956.0	962.2	960.7
15°	946.8	946.8	945.2	952.9	951.4
17.5°	931.3	932.8	934.4	940.6	942.1
20°	914.3	917.4	918.9	928.2	928.2
22.5°	898.8	900.4	903.4	912.7	912.7
25°	878.7	881.8	888.0	895.7	897.3
27.5°	858.6	860.1	867.9	878.7	880.2
30°	832.3	836.9	846.2	858.6	860.1
32.5°	809.1	813.7	824.5	836.9	840.0
35°	779.7	785.9	798.3	813.7	816.8
37.5°	753.4	758.0	773.5	790.5	795.2
40°	720.9	730.2	745.7	765.8	773.5
42.5°	688.4	697.7	716.3	742.6	751.8
45°	654.4	665.2	688.4	717.8	730.2
47.5°	620.3	632.7	659.0	693.1	707.0
50°	581.7	597.1	629.6	668.3	683.8
52.5°	544.5	563.1	598.7	642.0	662.1
55°	505.9	524.4	570.8	615.7	637.4
57.5°	462.6	487.3	538.4	589.4	612.6
60°	422.3	445.5	507.4	563.1	586.3
62.5°	379.0	410.0	476.5	535.3	558.5
65°	334.2	368.2	444.0	502.8	526.0
67.5°	293.9	331.1	411.5	470.3	493.5
70°	246.0	292.4	375.9	434.7	457.9
72.5°	201.1	252.2	338.8	396.0	417.7
75°	157.8	215.0	300.1	351.2	362.0
77.5°	117.6	177.9	259.9	281.6	273.8
80°	83.5	142.3	202.7	191.8	196.5
82.5°	54.1	108.3	125.3	142.3	147.0
85°	30.9	63.4	77.3	83.5	86.6
87.5°	13.9	23.2	30.9	30.9	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)