

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: P294377

Luminaire Tested: **24GR-LD5-48-FGW080-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294377  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-48-FGW080-UNV-L92765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3445.0 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

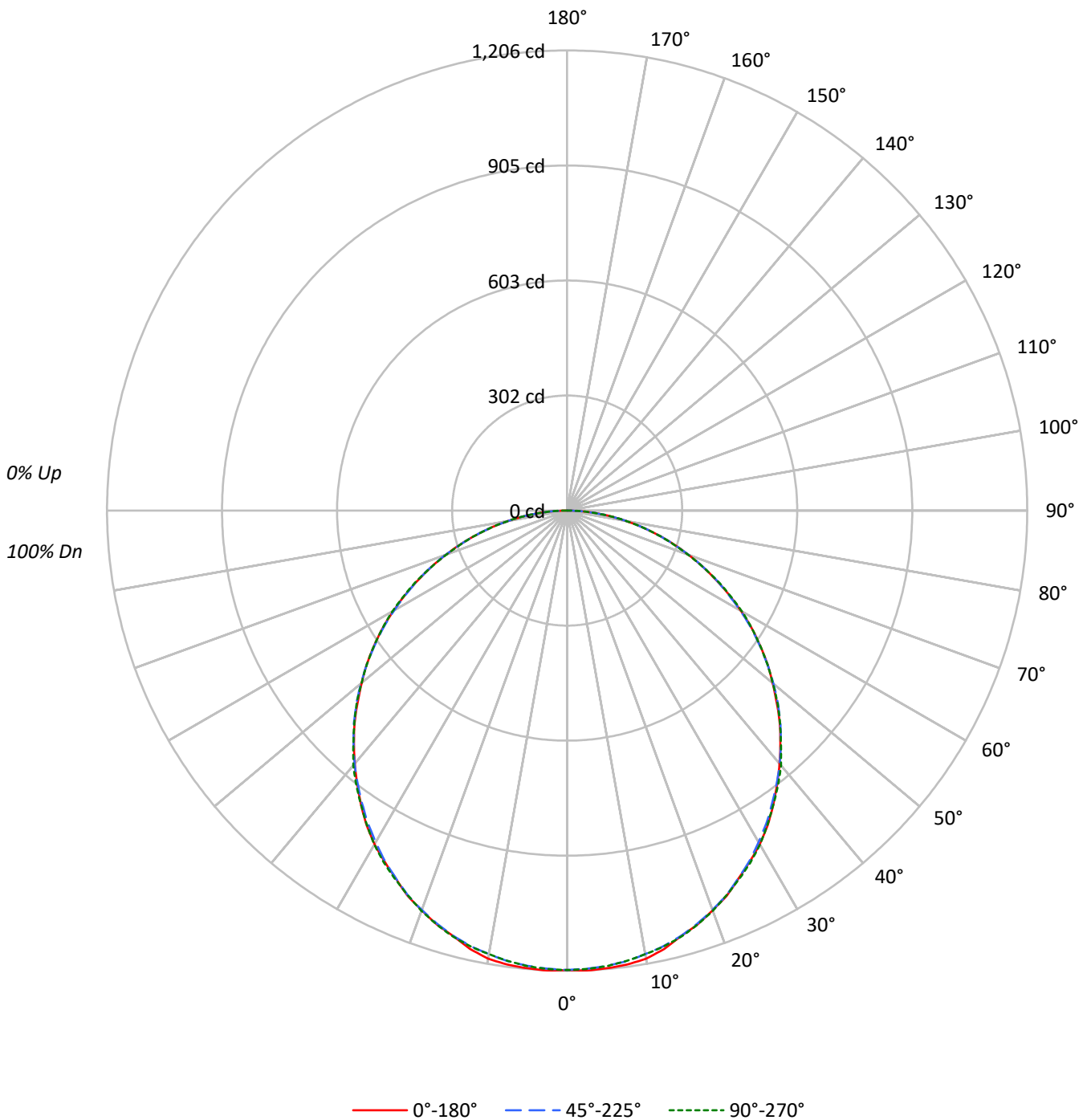
Input Watts (W): 32.55  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294377

CATALOG NUMBER: 24GR-LD5-48-FGW080-UNV-L92765-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P294377

CATALOG NUMBER: 24GR-LD5-48-FGW080-UNV-L92765-W2A1-U-3000K

**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	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	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	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	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°	1620	1620	1620
5°	1626	1618	1619
10°	1630	1613	1613
15°	1608	1607	1610
20°	1596	1595	1598
25°	1579	1578	1582
30°	1569	1559	1570
35°	1547	1539	1547
40°	1521	1523	1531
45°	1500	1504	1501
50°	1471	1476	1473
55°	1449	1445	1449
60°	1415	1410	1423
65°	1371	1376	1381
70°	1327	1333	1323
75°	1280	1280	1280
80°	1209	1209	1221
85°	1116	1129	1091



TEST NUMBER: P294377

CATALOG NUMBER: 24GR-LD5-48-FGW080-UNV-L92765-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.9	3.3
10°-20°	325.5	9.4
20°-30°	490.5	14.2
30°-40°	587.5	17.1
40°-50°	608.1	17.7
50°-60°	551.4	16.0
60°-70°	427.5	12.4
70°-80°	260.0	7.5
80°-90°	80.9	2.3
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°	929.8	27.0
0°-40°	1517.2	44.0
0°-60°	2676.7	77.7
0°-90°	3445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3445.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1204	1204	1204	1204	1204	
5°	1204	1197	1198	1196	1198	115
15°	1154	1155	1154	1150	1156	326
25°	1064	1064	1063	1066	1066	491
35°	942	935	937	941	942	589
45°	788	790	790	787	789	607
55°	618	614	616	618	618	552
65°	431	433	432	431	434	427
75°	246	245	246	245	246	260
85°	72	72	73	72	71	81
90°	0	0	0	0	0	



TEST NUMBER: P294377

CATALOG NUMBER: 24GR-LD5-48-FGW080-UNV-L92765-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1204.1	1204.1	1204.1	1204.1	1204.1
2.5°	1206.5	1201.6	1201.6	1200.0	1202.4
5°	1204.1	1196.8	1197.6	1195.9	1198.4
7.5°	1200.0	1190.3	1191.1	1189.4	1190.3
10°	1192.7	1181.3	1180.5	1179.7	1180.5
12.5°	1176.4	1169.9	1169.1	1167.5	1169.9
15°	1154.5	1155.3	1153.7	1149.6	1156.1
17.5°	1137.4	1136.6	1135.0	1130.9	1137.4
20°	1114.7	1115.5	1113.9	1112.3	1116.3
22.5°	1092.8	1090.3	1091.1	1090.3	1091.1
25°	1063.5	1063.5	1062.7	1065.9	1065.9
27.5°	1036.7	1033.5	1035.1	1038.3	1039.9
30°	1009.9	1001.8	1003.4	1006.6	1010.7
32.5°	978.2	970.1	971.7	975.0	976.6
35°	941.6	935.1	936.8	940.8	941.6
37.5°	904.3	900.2	901.8	905.1	907.5
40°	866.1	864.5	866.9	866.1	871.8
42.5°	827.1	826.3	828.7	828.7	829.5
45°	788.1	789.7	790.5	787.3	788.9
47.5°	745.0	745.8	749.1	747.5	748.3
50°	702.8	702.0	705.2	706.0	703.6
52.5°	662.2	658.1	661.3	663.0	661.3
55°	617.5	614.2	615.8	618.3	617.5
57.5°	573.6	570.3	571.2	575.2	573.6
60°	525.7	524.8	524.0	527.3	528.9
62.5°	478.5	477.7	476.1	479.4	481.0
65°	430.6	433.0	432.2	430.6	433.9
67.5°	385.1	387.5	385.1	383.5	383.5
70°	337.2	339.6	338.8	337.2	336.4
72.5°	292.5	292.5	290.9	290.0	290.9
75°	246.2	245.4	246.2	245.4	246.2
77.5°	200.7	201.5	201.5	201.5	200.7
80°	156.0	156.0	156.0	156.8	157.6
82.5°	114.6	112.1	114.6	112.9	113.7
85°	72.3	71.5	73.1	72.3	70.7
87.5°	32.5	33.3	33.3	34.1	34.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)