

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: P219089

Luminaire Tested: **24GR-LD5-56-A-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219089
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-A-UNV-L930-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH A LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4581.8 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

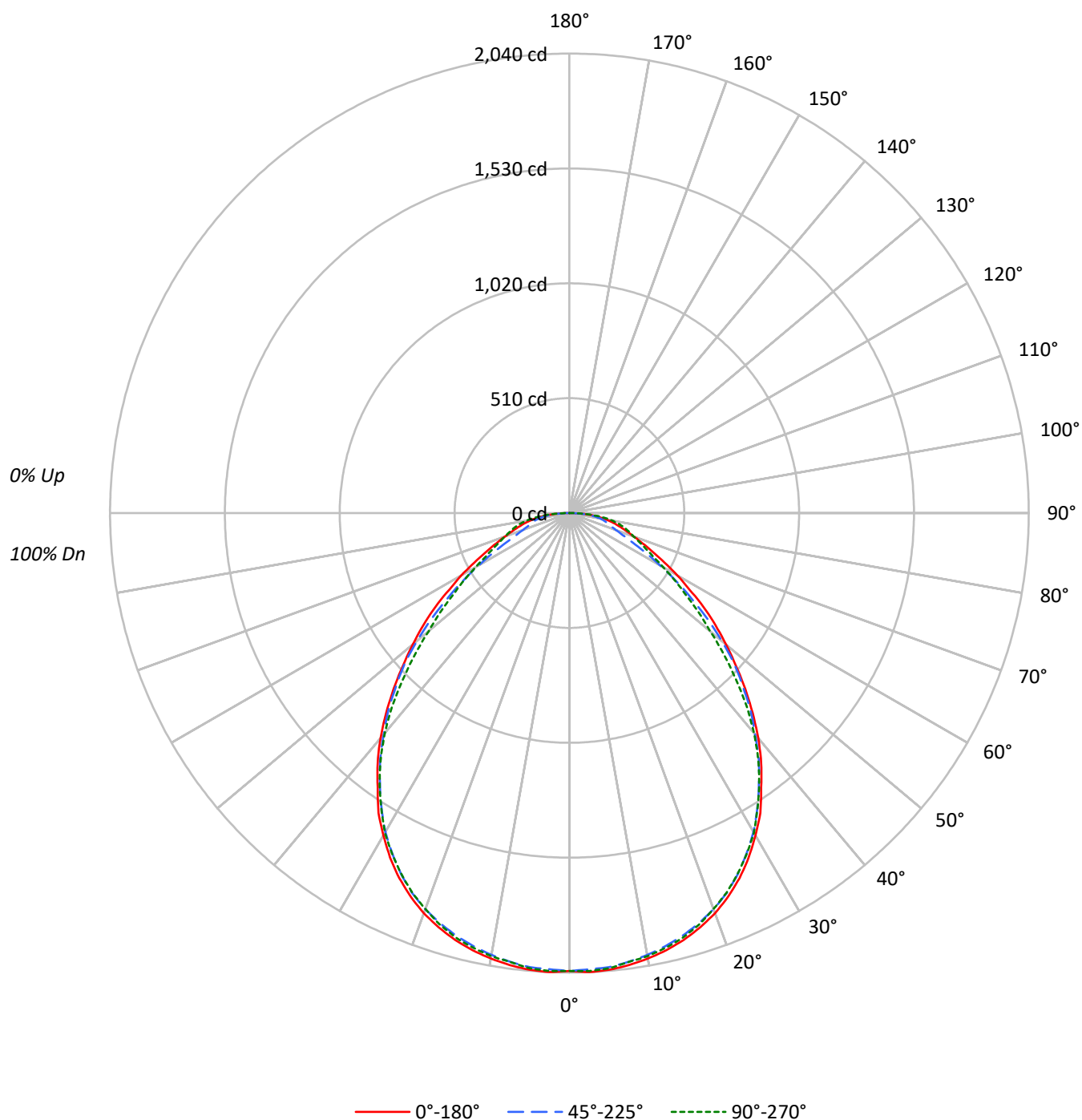
Input Watts (W): 45.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P219089

CATALOG NUMBER: 24GR-LD5-56-A-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P219089

CATALOG NUMBER: 24GR-LD5-56-A-UNV-L930-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63		
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55		
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49		
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43		
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39		
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35		
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32		
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3114	3114	3114
5°	3129	3111	3119
10°	3123	3098	3107
15°	3111	3080	3093
20°	3082	3050	3049
25°	3021	2989	2987
30°	2922	2892	2898
35°	2775	2744	2747
40°	2610	2564	2549
45°	2392	2360	2266
50°	2162	2103	1945
55°	1941	1767	1677
60°	1700	1423	1474
65°	1483	1118	1357
70°	1357	976	1357
75°	1358	1039	1495
80°	1473	1223	1705
85°	1617	1381	1829



TEST NUMBER: P219089

CATALOG NUMBER: 24GR-LD5-56-A-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.5	4.2
10°-20°	549.4	12.0
20°-30°	814.6	17.8
30°-40°	919.0	20.1
40°-50°	832.3	18.2
50°-60°	600.5	13.1
60°-70°	358.5	7.8
70°-80°	221.6	4.8
80°-90°	93.4	2.0
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°	1556.5	34.0
0°-40°	2475.5	54.0
0°-60°	3908.3	85.3
0°-90°	4581.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4581.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2033	2033	2033	2033	2033	
5°	2035	2032	2024	2022	2029	193
15°	1962	1950	1942	1943	1951	553
25°	1788	1778	1769	1762	1767	821
35°	1484	1482	1467	1468	1469	929
45°	1104	1097	1089	1062	1046	851
55°	727	704	662	629	628	649
65°	409	360	309	350	374	412
75°	229	199	176	219	253	245
85°	92	81	79	103	104	96
90°	0	0	0	0	0	



TEST NUMBER: P219089

CATALOG NUMBER: 24GR-LD5-56-A-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2032.9	2032.9	2032.9	2032.9	2032.9
2.5°	2039.9	2034.3	2027.2	2031.5	2035.0
5°	2035.0	2032.2	2023.7	2021.5	2028.6
7.5°	2024.4	2017.3	2009.5	2013.0	2010.2
10°	2008.1	2001.7	1991.9	1992.5	1997.5
12.5°	1988.3	1980.5	1969.9	1972.7	1976.9
15°	1962.1	1950.0	1942.3	1943.0	1950.8
17.5°	1928.8	1919.6	1909.7	1911.8	1915.4
20°	1890.6	1885.7	1871.5	1867.2	1870.7
22.5°	1842.5	1833.3	1825.5	1823.4	1824.1
25°	1787.9	1778.1	1768.8	1762.5	1767.4
27.5°	1724.3	1715.8	1703.7	1701.6	1705.8
30°	1652.1	1645.7	1635.1	1632.2	1638.6
32.5°	1578.4	1567.8	1553.0	1553.0	1554.4
35°	1484.3	1482.1	1467.3	1468.0	1469.4
37.5°	1399.4	1389.5	1381.0	1372.4	1376.7
40°	1305.2	1293.9	1282.6	1276.9	1274.8
42.5°	1204.0	1195.5	1190.6	1170.1	1165.1
45°	1104.2	1097.2	1089.4	1062.5	1046.2
47.5°	1002.3	1000.9	994.5	947.1	930.8
50°	907.4	905.3	882.6	832.4	816.1
52.5°	817.5	803.4	773.7	724.1	721.3
55°	726.9	704.3	661.8	629.3	627.9
57.5°	631.4	604.5	561.3	543.6	552.8
60°	555.0	513.9	464.4	466.5	481.3
62.5°	475.7	429.7	380.8	402.0	419.8
65°	409.1	360.3	308.6	350.4	374.4
67.5°	351.0	305.8	256.2	312.2	335.5
70°	303.0	266.2	218.0	276.8	303.0
72.5°	264.7	230.7	193.3	248.5	278.9
75°	229.4	198.9	175.6	218.7	252.7
77.5°	198.9	169.2	158.6	193.3	226.5
80°	167.0	140.1	138.7	168.4	193.3
82.5°	130.2	111.8	111.8	140.9	155.7
85°	92.0	80.7	78.6	102.7	104.1
87.5°	47.4	45.3	41.1	53.8	53.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)