

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: P293960

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293960
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-A19/156-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8551.0 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

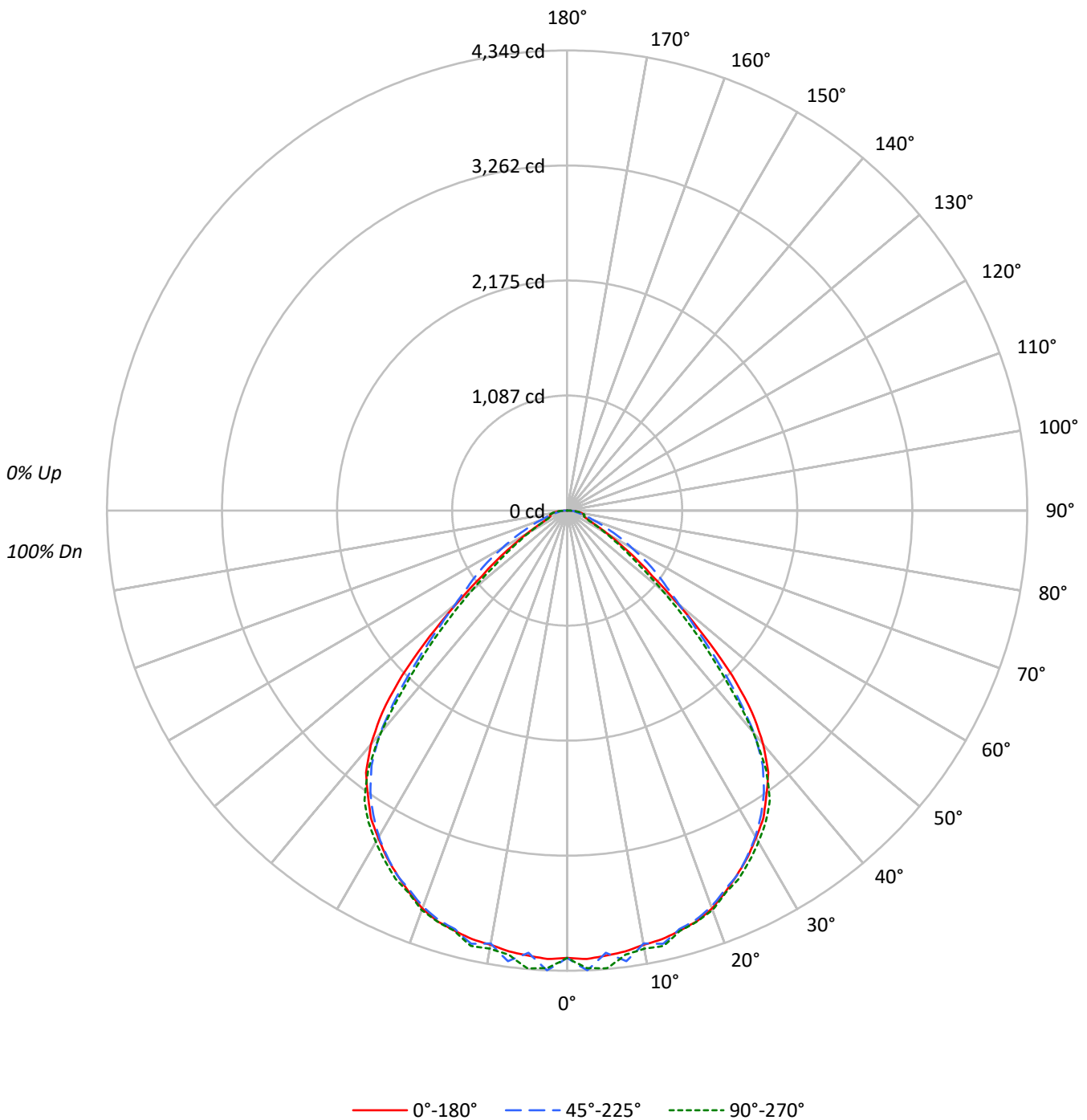
Input Watts (W): 65.472
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293960

CATALOG NUMBER: 24GR-LD5-85-A19/156-UNV-L83050-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P293960

CATALOG NUMBER: 24GR-LD5-85-A19/156-UNV-L83050-W2A1-U-4500K

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77				77
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53				53
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48				48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43				43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39				39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33				33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5689	5689	5689
5°	5702	5664	5865
10°	5692	5676	5745
15°	5725	5706	5729
20°	5730	5706	5753
25°	5641	5645	5700
30°	5547	5530	5620
35°	5391	5325	5486
40°	5063	4836	4810
45°	4196	3797	3601
50°	2823	2880	2461
55°	1862	2416	1614
60°	1194	1907	1105
65°	770	1456	748
70°	681	1042	681
75°	878	828	885
80°	1075	713	1128
85°	1250	1061	1314



TEST NUMBER: P293960

CATALOG NUMBER: 24GR-LD5-85-A19/156-UNV-L83050-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	404.8	4.7
10°-20°	1162.4	13.6
20°-30°	1750.0	20.5
30°-40°	2028.4	23.7
40°-50°	1584.5	18.5
50°-60°	846.1	9.9
60°-70°	435.1	5.1
70°-80°	246.1	2.9
80°-90°	93.5	1.1
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°	3317.3	38.8
0°-40°	5345.7	62.5
0°-60°	7776.3	90.9
0°-90°	8551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8551.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4228	4228	4228	4228	4228	
5°	4221	4340	4194	4309	4342	401
15°	4110	4136	4096	4122	4113	1161
25°	3800	3787	3802	3797	3840	1751
35°	3282	3267	3242	3307	3340	2046
45°	2205	2207	1995	1978	1892	1662
55°	794	1004	1030	928	688	732
65°	242	504	457	503	235	266
75°	169	317	159	297	170	171
85°	81	106	69	106	85	84
90°	0	0	0	0	0	



TEST NUMBER: P293960

CATALOG NUMBER: 24GR-LD5-85-A19/156-UNV-L83050-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4228.2	4228.2	4228.2	4228.2	4228.2
2.5°	4242.0	4318.9	4349.1	4312.0	4328.5
5°	4221.4	4339.5	4193.9	4309.2	4342.2
7.5°	4202.1	4189.8	4295.5	4185.7	4232.3
10°	4166.4	4174.7	4154.1	4232.3	4204.9
12.5°	4149.9	4198.0	4193.9	4154.1	4214.5
15°	4110.1	4136.2	4096.4	4122.5	4112.9
17.5°	4070.3	4057.9	4053.8	4064.8	4074.4
20°	4001.6	3960.4	3985.2	3987.9	4018.1
22.5°	3902.8	3878.0	3883.5	3908.3	3911.0
25°	3799.8	3787.4	3802.5	3797.0	3839.6
27.5°	3692.7	3676.2	3685.8	3706.4	3732.5
30°	3570.4	3566.3	3559.5	3577.3	3617.1
32.5°	3449.6	3416.6	3411.1	3448.2	3493.5
35°	3282.1	3267.0	3242.2	3306.8	3339.7
37.5°	3122.8	3076.1	3036.2	3074.7	3088.4
40°	2882.4	2846.7	2753.4	2757.5	2738.3
42.5°	2587.2	2561.1	2382.6	2351.0	2297.4
45°	2205.4	2206.8	1995.3	1977.5	1892.3
47.5°	1761.9	1840.1	1656.1	1635.5	1509.2
50°	1348.5	1490.0	1376.0	1343.0	1175.5
52.5°	1012.1	1219.4	1183.7	1112.3	881.6
55°	793.7	1003.8	1029.9	928.3	688.0
57.5°	597.4	826.7	869.3	785.5	531.4
60°	443.6	696.2	708.6	675.6	410.6
62.5°	329.6	591.9	575.4	579.5	304.9
65°	241.7	504.0	457.3	502.6	234.8
67.5°	197.7	436.7	355.7	435.3	190.9
70°	173.0	387.3	265.0	383.1	173.0
72.5°	167.5	355.7	210.1	340.6	168.9
75°	168.9	317.2	159.3	296.6	170.3
77.5°	155.2	260.9	120.8	252.7	162.0
80°	138.7	197.7	92.0	200.5	145.6
82.5°	118.1	144.2	74.2	148.3	122.2
85°	81.0	105.7	68.7	105.7	85.1
87.5°	38.5	63.2	42.6	60.4	43.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)