

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: P475656

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475656  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-30-A19/156-UNV-L835-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2915.4 lumens  
Efficiency: N/A  
Efficacy: 136.9 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

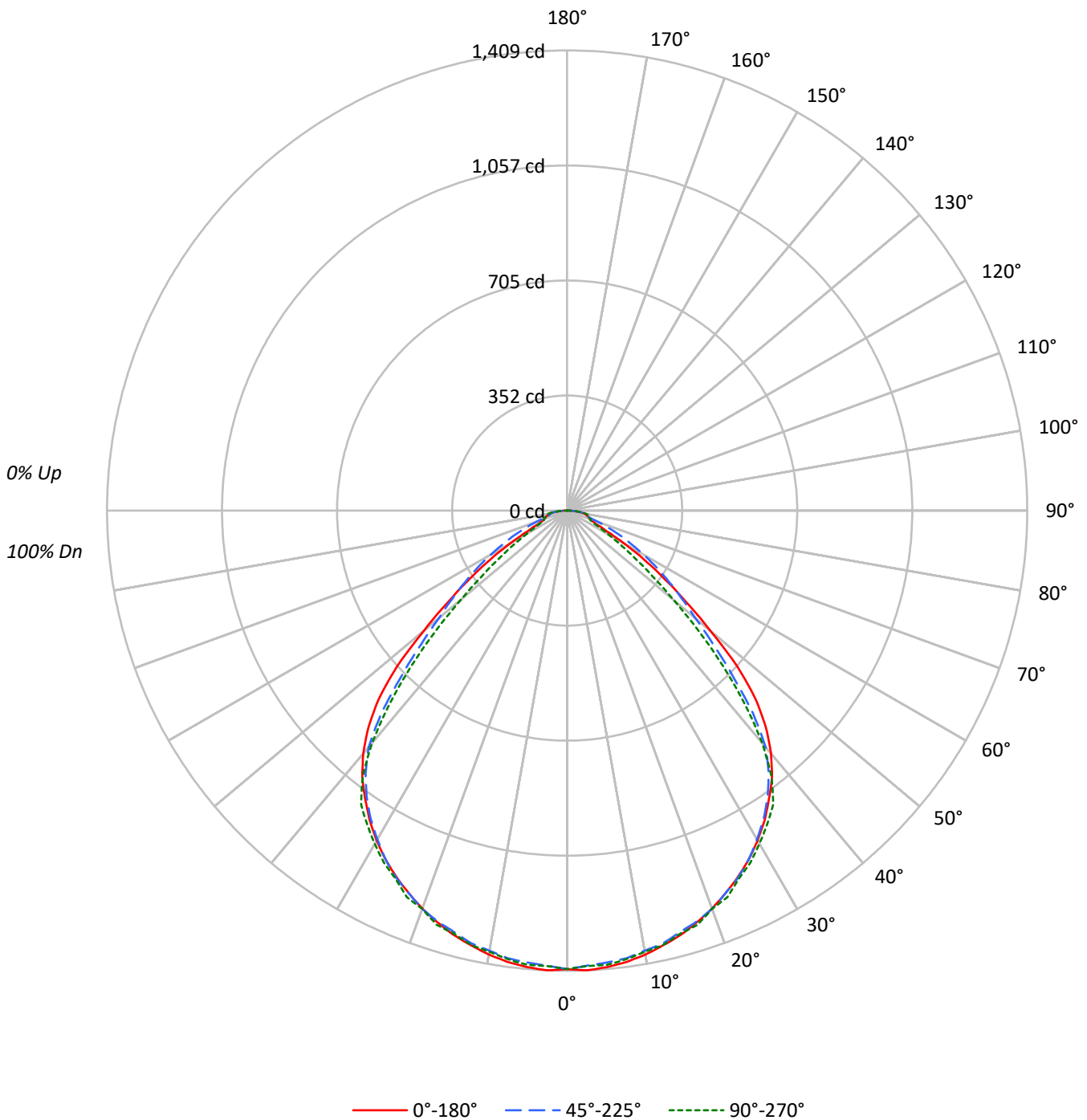
Input Watts (W): 21.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78					76				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61					59				
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49					47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40					38				
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36					34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33					31				

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

	0°	45°	90°
0°	1889	1889	1889
5°	1895	1877	1886
10°	1886	1869	1874
15°	1873	1861	1868
20°	1857	1858	1858
25°	1837	1841	1847
30°	1812	1806	1830
35°	1771	1758	1806
40°	1706	1661	1632
45°	1553	1367	1289
50°	1198	1072	886
55°	852	894	586
60°	539	722	383
65°	313	568	280
70°	290	391	297
75°	333	298	354
80°	416	411	467
85°	454	482	500



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.3	4.5
10°-20°	378.4	13.0
20°-30°	571.0	19.6
30°-40°	670.2	23.0
40°-50°	564.2	19.4
50°-60°	320.5	11.0
60°-70°	160.0	5.5
70°-80°	83.9	2.9
80°-90°	35.0	1.2
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°	1081.7	37.1
0°-40°	1751.9	60.1
0°-60°	2636.6	90.4
0°-90°	2915.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2915.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1404	1404	1404	1404	1404	
5°	1403	1393	1389	1392	1396	133
15°	1345	1342	1336	1340	1341	379
25°	1238	1238	1240	1243	1244	570
35°	1078	1072	1070	1088	1100	673
45°	816	784	718	706	678	615
55°	363	388	381	329	250	330
65°	98	204	178	151	88	112
75°	64	99	57	86	68	68
85°	29	35	31	40	32	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1403.9	1403.9	1403.9	1403.9	1403.9
2.5°	1408.9	1402.1	1394.4	1392.3	1395.9
5°	1403.0	1392.9	1389.4	1391.7	1396.5
7.5°	1393.8	1383.4	1382.8	1378.7	1385.8
10°	1380.2	1373.3	1368.3	1370.7	1371.6
12.5°	1362.9	1360.9	1357.0	1353.7	1361.8
15°	1344.8	1341.6	1336.2	1339.8	1340.7
17.5°	1321.7	1319.9	1319.0	1321.7	1329.4
20°	1297.1	1297.1	1297.9	1298.5	1297.3
22.5°	1267.7	1266.8	1268.0	1270.3	1281.6
25°	1237.7	1238.3	1239.8	1243.0	1243.9
27.5°	1204.4	1204.7	1204.2	1207.4	1215.1
30°	1166.2	1165.0	1162.6	1169.7	1178.0
32.5°	1124.6	1122.2	1119.6	1130.5	1139.4
35°	1078.0	1072.1	1070.0	1088.1	1099.7
37.5°	1030.2	1018.1	1013.6	1027.0	1028.4
40°	971.5	953.3	945.9	932.9	929.0
42.5°	900.8	882.1	842.0	821.9	807.6
45°	816.2	783.6	718.3	705.8	677.6
47.5°	707.0	672.3	607.0	580.3	548.2
50°	572.5	552.4	512.0	478.8	423.2
52.5°	457.7	461.8	442.8	396.8	328.0
55°	363.0	388.2	381.1	328.6	249.9
57.5°	279.3	333.6	325.0	270.4	190.8
60°	200.3	285.8	268.3	222.6	142.2
62.5°	137.4	244.0	219.9	183.7	108.9
65°	98.2	203.6	178.4	151.4	87.9
67.5°	80.7	166.5	136.8	128.5	76.6
70°	73.6	134.2	99.4	112.2	75.4
72.5°	70.0	112.5	73.0	98.2	71.8
75°	64.1	98.8	57.3	86.1	68.0
77.5°	59.4	85.5	53.4	75.4	66.2
80°	53.7	67.7	53.1	63.8	60.3
82.5°	43.3	49.3	44.8	52.2	48.7
85°	29.4	35.0	31.2	39.5	32.4
87.5°	14.5	17.2	13.9	18.7	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)