

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: NEO-RAY

Report Number: P231660

Luminaire Tested: **S121-DR-2-30-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231660
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33906)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121-DR-2-30-X-0048-1-U-DD-1-W
Description: DEFINE 1 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

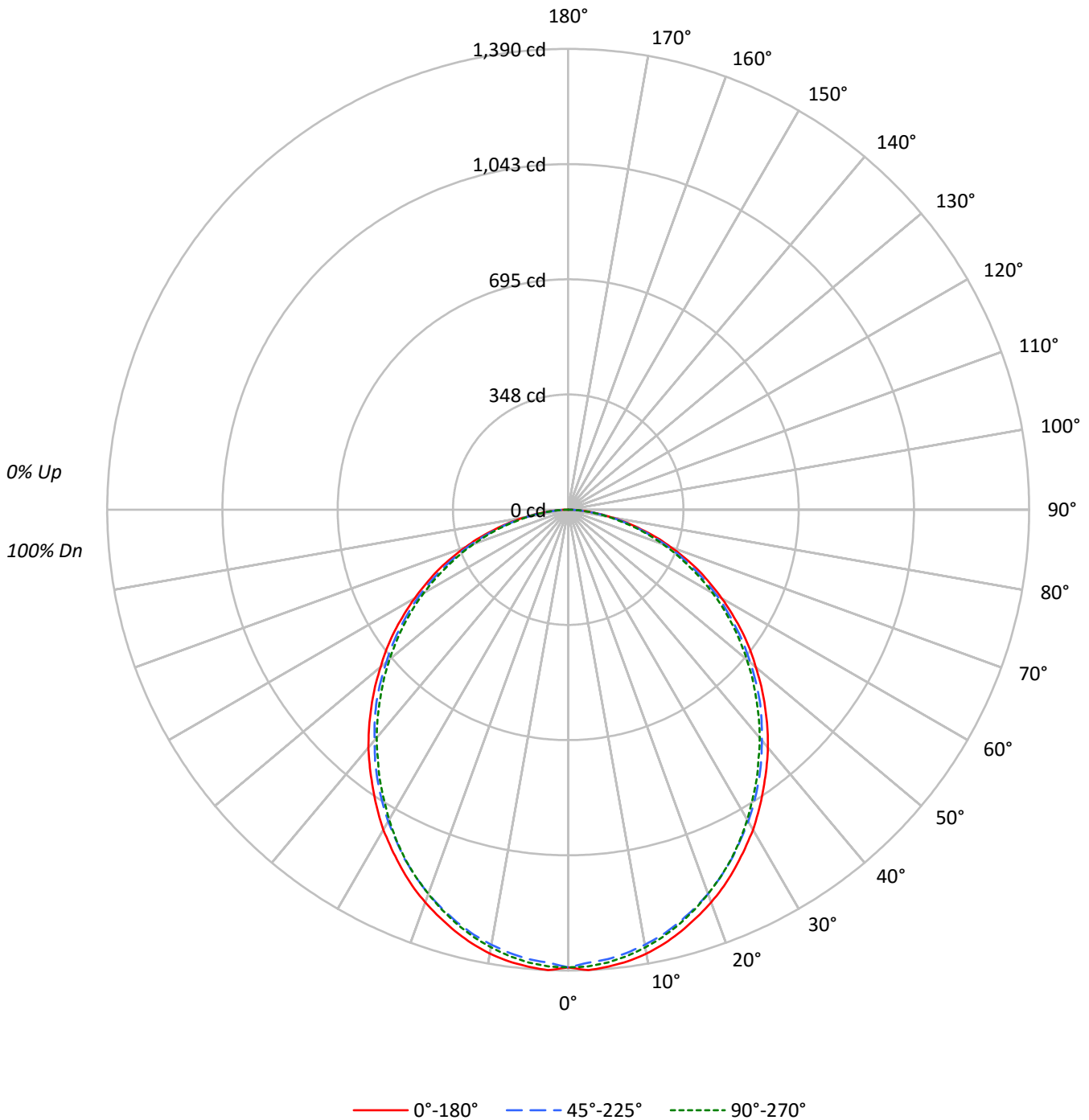
Lumens per Lamp: N/A
Luminaire Lumens: 3554.1 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.1' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 42.6
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38595	38595	38595
5°	38832	38204	38473
10°	38600	37828	38055
15°	38104	37317	37456
20°	37499	36690	36690
25°	36758	35916	35866
30°	35985	35055	34849
35°	35038	34164	33836
40°	34193	33142	32791
45°	33180	32294	31662
50°	32112	31137	30581
55°	31146	30054	29431
60°	29909	28925	28120
65°	28710	27440	26488
70°	26836	25790	24874
75°	24564	23527	22662
80°	21397	20367	19594
85°	17995	16424	15910



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	3.7
10°-20°	366.2	10.3
20°-30°	539.5	15.2
30°-40°	628.9	17.7
40°-50°	630.9	17.8
50°-60°	553.9	15.6
60°-70°	412.3	11.6
70°-80°	231.0	6.5
80°-90°	61.4	1.7
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°	1035.7	29.1
0°-40°	1664.6	46.8
0°-60°	2849.5	80.2
0°-90°	3554.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3554.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1380	1380	1380	1380	1380	
5°	1384	1376	1361	1374	1371	131
15°	1316	1305	1289	1299	1294	371
25°	1192	1179	1164	1166	1163	549
35°	1027	1015	1001	996	991	643
45°	839	831	817	806	801	648
55°	639	631	617	609	604	571
65°	434	426	415	407	400	428
75°	227	223	218	210	210	242
85°	56	54	51	51	50	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1380.5	1380.5	1380.5	1380.5	1380.5
2.5°	1390.2	1382.1	1367.7	1382.1	1378.9
5°	1383.7	1375.7	1361.3	1374.1	1370.9
7.5°	1374.1	1364.5	1348.5	1361.3	1358.1
10°	1359.7	1346.9	1332.5	1342.1	1340.5
12.5°	1340.5	1329.3	1313.3	1322.9	1319.7
15°	1316.5	1305.3	1289.3	1298.9	1294.1
17.5°	1289.3	1278.0	1262.0	1270.0	1265.2
20°	1260.4	1247.6	1233.2	1239.6	1233.2
22.5°	1228.4	1215.6	1199.6	1204.4	1199.6
25°	1191.6	1178.7	1164.3	1165.9	1162.7
27.5°	1153.1	1141.9	1124.3	1127.5	1122.7
30°	1114.7	1103.5	1085.9	1084.3	1079.5
32.5°	1071.4	1060.2	1044.2	1041.0	1034.6
35°	1026.6	1015.4	1001.0	996.2	991.4
37.5°	981.8	972.1	956.1	949.7	943.3
40°	936.9	925.7	908.1	901.7	898.5
42.5°	888.9	877.7	863.2	853.6	850.4
45°	839.2	831.2	816.8	805.6	800.8
47.5°	789.6	781.6	767.1	755.9	752.7
50°	738.3	731.9	715.9	706.3	703.1
52.5°	690.3	683.9	667.8	658.2	653.4
55°	639.0	631.0	616.6	608.6	603.8
57.5°	586.2	581.4	567.0	558.9	554.1
60°	534.9	528.5	517.3	506.1	502.9
62.5°	483.7	478.9	466.1	456.4	451.6
65°	434.0	426.0	414.8	406.8	400.4
67.5°	381.2	376.4	365.2	357.1	352.3
70°	328.3	323.5	315.5	307.5	304.3
72.5°	280.3	272.3	264.3	259.5	256.2
75°	227.4	222.6	217.8	209.8	209.8
77.5°	181.0	174.6	171.4	166.6	163.4
80°	132.9	131.3	126.5	124.9	121.7
82.5°	94.5	91.3	86.5	84.9	83.3
85°	56.1	54.5	51.2	51.2	49.6
87.5°	25.6	24.0	20.8	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)