

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056441

Luminaire Tested: S125R3DR-S610D830-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S610D830-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

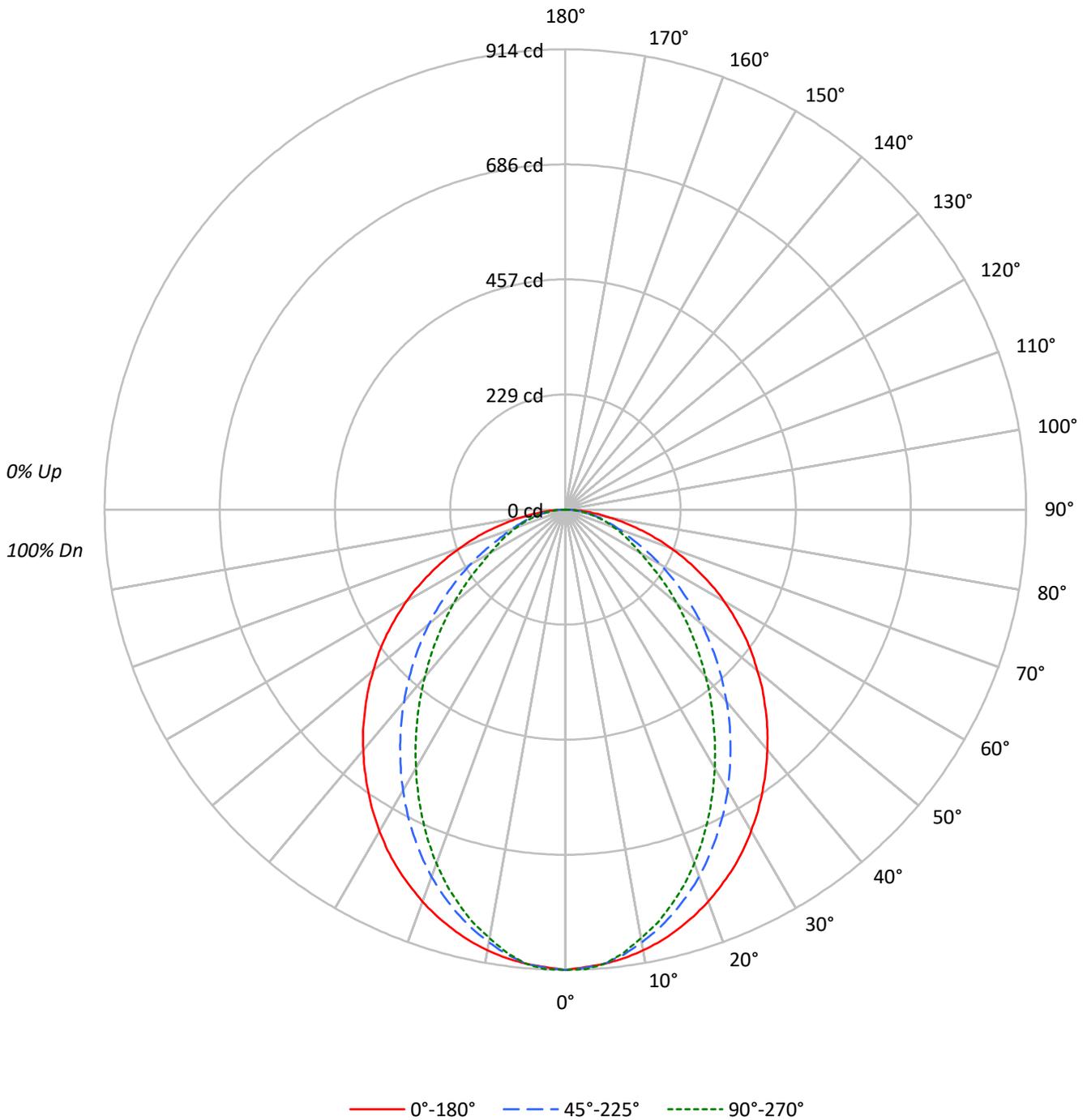
Lumens per Lamp: N/A
Luminaire Lumens: 1937.4 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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: 24 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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6462	6462	6462
5°	6424	6419	6424
10°	6381	6264	6205
15°	6317	6072	5948
20°	6232	5837	5627
25°	6137	5558	5246
30°	6017	5256	4839
35°	5886	4929	4417
40°	5754	4592	4001
45°	5614	4239	3586
50°	5465	3878	3174
55°	5327	3482	2760
60°	5139	3060	2425
65°	4884	2596	2255
70°	4587	2321	2110
75°	4146	2139	1988
80°	3603	1938	1856
85°	2815	1711	1711

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5614 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	4.4
10°-20°	234.8	12.1
20°-30°	331.7	17.1
30°-40°	365.2	18.8
40°-50°	340.6	17.6
50°-60°	271.9	14.0
60°-70°	183.0	9.4
70°-80°	97.5	5.0
80°-90°	27.1	1.4
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°	652.1	33.7
0°-40°	1017.3	52.5
0°-60°	1629.9	84.1
0°-90°	1937.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1937.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	914	914	914	914	914	
5°	905	913	905	902	905	86
15°	863	858	830	815	813	243
25°	787	763	713	681	672	362
35°	682	642	571	526	512	427
45°	562	508	424	372	359	434
55°	432	367	282	238	224	386
65°	292	228	155	138	135	290
75°	152	101	78	74	73	162
85°	35	24	21	22	21	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	914.1	914.1	914.1	914.1	914.1
2.5°	909.3	916.8	910.7	912.1	913.4
5°	905.3	912.8	904.6	901.9	905.3
7.5°	898.5	904.6	891.0	884.8	887.6
10°	888.9	893.0	872.6	864.4	864.4
12.5°	877.4	877.4	852.9	841.3	841.3
15°	863.1	858.3	829.7	815.4	812.7
17.5°	846.7	837.9	803.8	785.5	782.1
20°	828.4	814.1	775.9	752.1	748.0
22.5°	807.9	789.6	745.3	716.0	711.3
25°	786.8	763.0	712.6	681.3	672.5
27.5°	763.0	734.4	679.3	643.9	633.0
30°	737.1	704.5	643.9	604.4	592.8
32.5°	710.6	673.8	607.8	565.6	552.7
35°	682.0	641.9	571.1	526.1	511.8
37.5°	653.4	609.9	535.0	488.0	473.1
40°	623.5	575.8	497.6	449.2	433.6
42.5°	593.5	542.5	460.8	411.8	395.5
45°	561.5	508.4	424.0	372.3	358.7
47.5°	530.9	473.7	388.0	337.6	322.6
50°	496.9	437.7	352.6	302.2	288.6
52.5°	465.6	402.3	317.2	270.2	255.9
55°	432.2	366.9	282.5	237.5	223.9
57.5°	397.5	331.5	249.1	206.9	194.0
60°	363.5	296.1	216.4	177.6	171.5
62.5°	328.8	262.7	185.8	155.9	151.8
65°	292.0	228.0	155.2	137.5	134.8
67.5°	257.3	194.7	130.7	120.5	117.8
70°	221.9	161.3	112.3	103.5	102.1
72.5°	187.2	129.3	94.6	88.5	87.1
75°	151.8	100.7	78.3	73.5	72.8
77.5°	119.1	75.6	61.9	59.9	58.5
80°	88.5	56.5	47.6	46.3	45.6
82.5°	60.6	38.8	34.0	34.0	32.7
85°	34.7	23.8	21.1	21.8	21.1
87.5°	12.9	10.2	9.5	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)