

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1062120

Luminaire Tested: S125RDR-H610D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062120
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

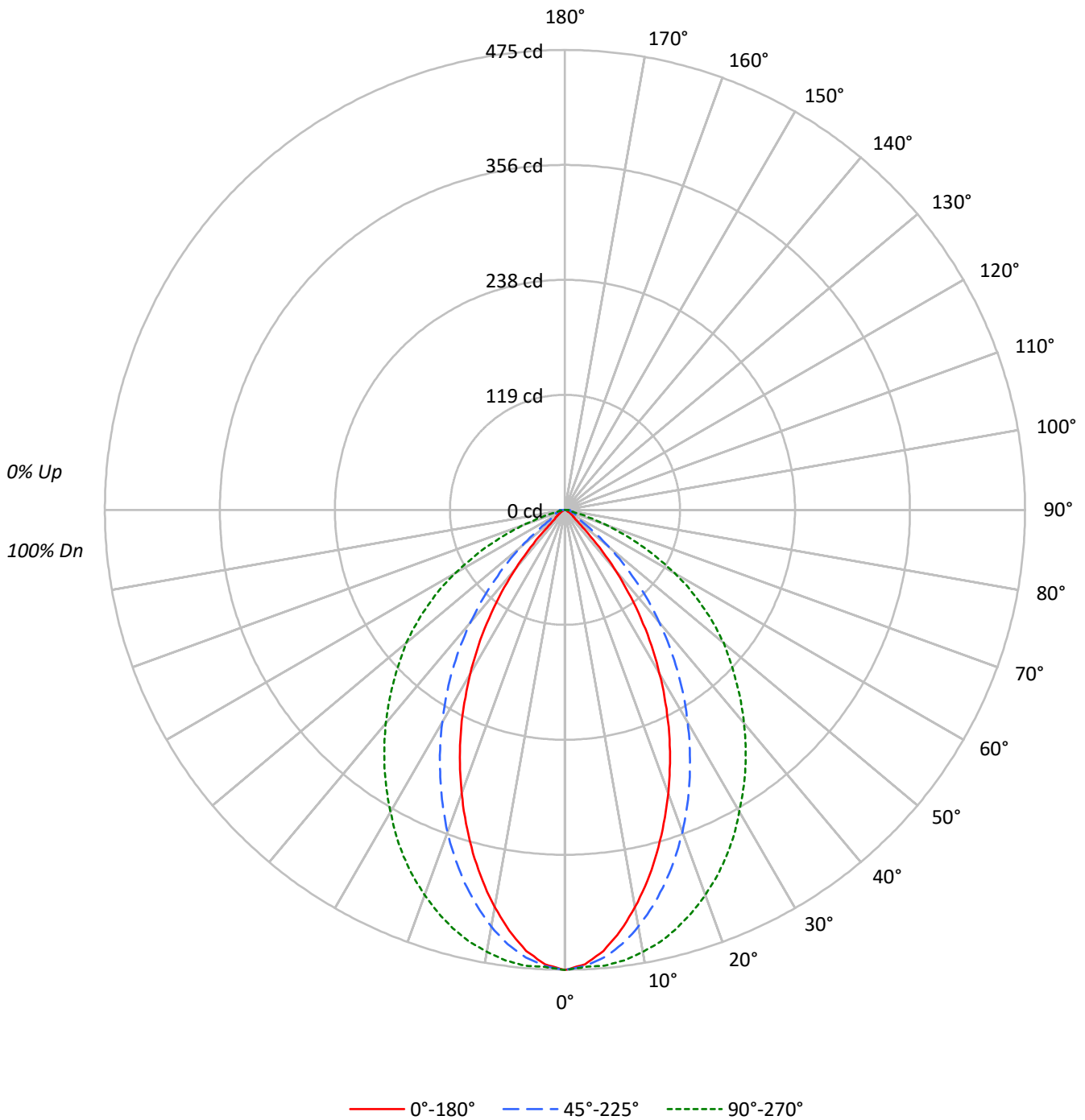
Lumens per Lamp: N/A
Luminaire Lumens: 614.8 lumens
Efficiency: N/A
Efficacy: 35.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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

TEST NUMBER: P1062120

CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1062120

CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-BVL-W

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3272	3272	3272
5°	3160	3208	3266
10°	2913	3057	3241
15°	2615	2845	3188
20°	2282	2596	3102
25°	1933	2314	2996
30°	1553	2015	2863
35°	1149	1700	2729
40°	712	1357	2586
45°	278	992	2431
50°	130	622	2290
55°	95	266	2079
60°	66	189	1803
65°	42	197	1403
70°	42	181	882
75°	56	184	282
80°	83	210	190
85°	126	419	292

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2431 cd/sqm



TEST NUMBER: P1062120

CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	7.1
10°-20°	112.9	18.4
20°-30°	143.8	23.4
30°-40°	133.8	21.8
40°-50°	92.1	15.0
50°-60°	52.2	8.5
60°-70°	24.6	4.0
70°-80°	7.7	1.3
80°-90°	4.0	0.7
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°	300.3	48.8
0°-40°	434.1	70.6
0°-60°	578.4	94.1
0°-90°	614.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	614.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	457	464	464	468	472	42
15°	367	379	399	429	447	102
25°	254	271	305	356	394	116
35°	137	156	202	271	325	85
45°	28	45	102	184	250	27
55°	8	9	22	106	173	7
65°	3	3	12	38	86	3
75°	2	5	7	7	11	2
85°	2	4	5	5	4	2
90°	0	0	0	0	0	



TEST NUMBER: P1062120

CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	475.2	475.2	475.2	475.2	475.2
2.5°	469.9	474.6	471.5	472.0	472.5
5°	457.2	463.5	464.1	468.3	472.5
7.5°	438.7	446.7	452.5	462.5	469.4
10°	416.6	426.1	437.2	453.5	463.5
12.5°	392.8	403.9	419.2	442.4	456.7
15°	366.9	379.1	399.1	429.2	447.2
17.5°	339.5	353.2	377.5	413.4	436.1
20°	311.5	326.3	354.3	395.4	423.4
22.5°	283.5	298.8	330.0	375.9	409.7
25°	254.5	270.8	304.6	355.8	394.4
27.5°	224.9	241.8	279.3	335.3	378.0
30°	195.3	213.3	253.4	314.1	360.1
32.5°	166.3	184.3	228.1	293.0	342.6
35°	136.7	155.7	202.2	271.4	324.7
37.5°	107.2	127.8	176.9	249.2	306.2
40°	79.2	98.7	151.0	227.6	287.7
42.5°	52.8	71.8	127.8	205.9	268.7
45°	28.5	45.4	101.9	184.3	249.7
47.5°	15.3	24.3	79.7	163.1	231.2
50°	12.1	13.7	58.1	143.6	213.8
52.5°	10.0	11.1	38.0	125.1	193.8
55°	7.9	9.0	22.2	106.1	173.2
57.5°	6.3	7.4	14.3	88.2	153.1
60°	4.8	5.8	13.7	70.7	130.9
62.5°	3.7	4.2	12.7	54.4	107.7
65°	2.6	3.2	12.1	38.0	86.1
67.5°	2.1	2.6	11.1	24.3	64.4
70°	2.1	2.1	9.0	15.8	43.8
72.5°	2.1	3.7	7.9	10.6	26.4
75°	2.1	4.8	6.9	7.4	10.6
77.5°	2.1	5.3	5.8	5.8	5.8
80°	2.1	4.8	5.3	5.3	4.8
82.5°	2.1	4.2	4.8	5.3	4.2
85°	1.6	4.2	5.3	4.8	3.7
87.5°	1.6	4.2	4.8	4.2	2.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1062120
 CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-BVL-W

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	13.36	14.66	13.73	14.97	15.28
	3H	0.00	0.00	0.00	0.00	0.00	14.08	15.23	14.46	15.56	15.92
	4H	0.00	0.00	0.00	0.00	0.00	14.11	15.17	14.51	15.52	15.90
	6H	0.00	0.00	0.00	0.00	0.00	14.06	15.03	14.47	15.40	15.80
	8H	0.00	0.00	0.00	0.00	0.05	14.03	14.96	14.47	15.35	15.75
	12H	0.00	0.00	0.00	0.19	0.62	14.02	14.90	14.45	15.28	15.71
4H	2H	0.00	0.00	0.00	0.00	0.00	13.16	14.22	13.56	14.57	14.95
	3H	0.00	0.00	0.00	0.00	0.35	13.91	14.78	14.32	15.18	15.59
	4H	0.00	0.47	0.13	0.89	1.33	13.94	14.72	14.38	15.13	15.58
	6H	0.98	1.65	1.45	2.10	2.56	13.92	14.59	14.38	15.03	15.50
	8H	1.56	2.18	2.03	2.63	3.10	13.90	14.53	14.37	14.97	15.45
	12H	2.12	2.67	2.61	3.15	3.63	13.91	14.46	14.40	14.94	15.42
8H	4H	1.11	1.74	1.58	2.18	2.66	13.82	14.45	14.29	14.89	15.37
	6H	2.69	3.19	3.19	3.69	4.17	13.81	14.32	14.32	14.82	15.30
	8H	3.47	3.93	3.99	4.44	4.94	13.83	14.28	14.35	14.80	15.29
	12H	4.30	4.71	4.82	5.20	5.78	13.89	14.29	14.40	14.79	15.36
12H	4H	1.34	1.89	1.82	2.37	2.84	13.78	14.33	14.27	14.81	15.29
	6H	3.06	3.52	3.58	4.03	4.52	13.77	14.22	14.29	14.74	15.23
	8H	4.04	4.45	4.56	4.94	5.51	13.82	14.22	14.33	14.71	15.29