

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: P1062151

Luminaire Tested: S125RDR-H610D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062151
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D940-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

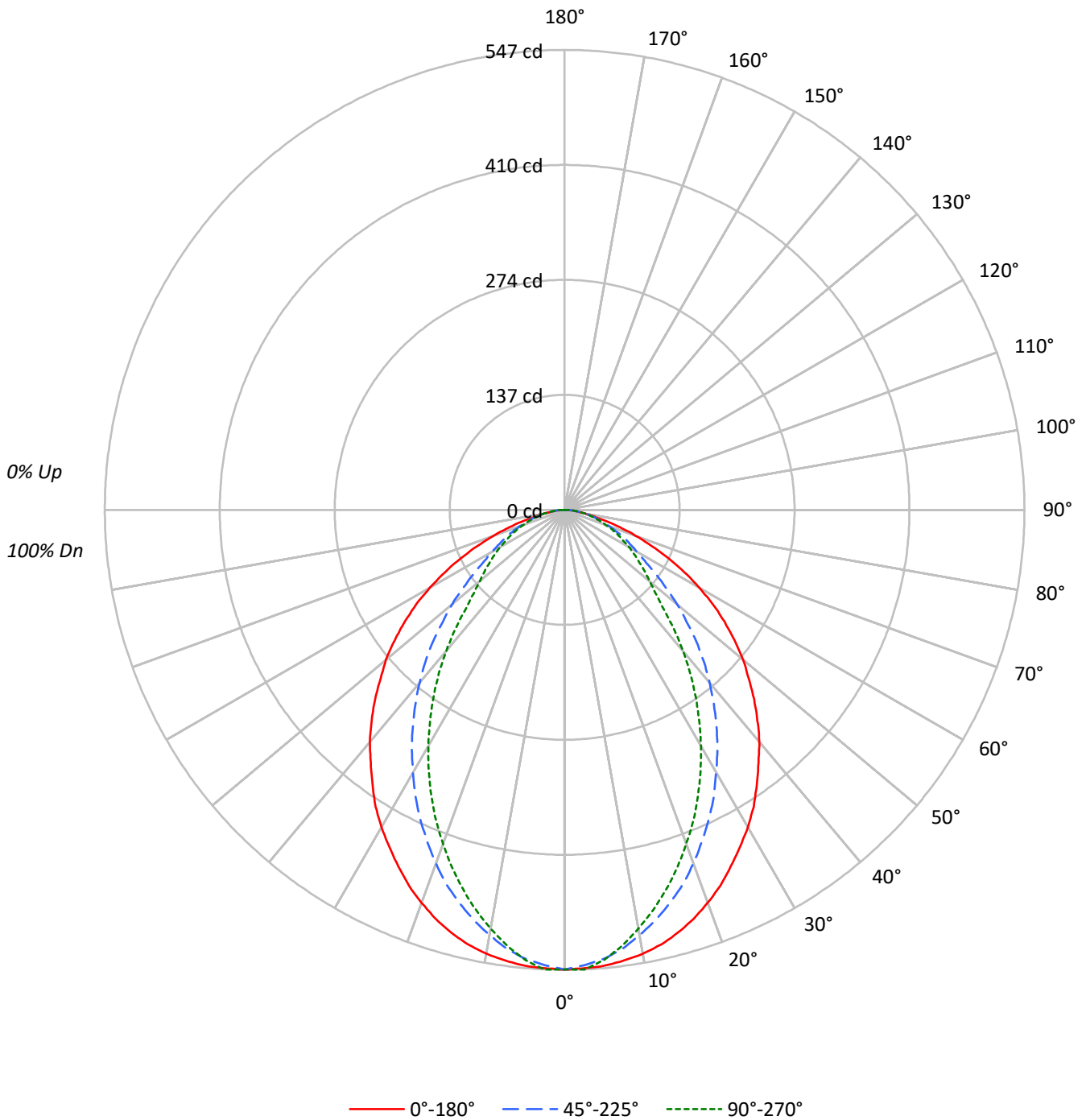
Lumens per Lamp: N/A
Luminaire Lumens: 1035.8 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87					87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75					75															
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65					65															
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57					57															
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50					50															
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45					45															
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40					40															
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36					36															
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33					33															
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30					30															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3765	3765	3765
5°	3763	3705	3714
10°	3748	3590	3536
15°	3712	3449	3330
20°	3645	3280	3097
25°	3554	3085	2850
30°	3465	2865	2578
35°	3349	2645	2285
40°	3239	2411	1969
45°	3104	2156	1612
50°	2970	1869	1412
55°	2786	1561	1304
60°	2542	1365	1219
65°	2224	1248	1132
70°	1804	1123	1051
75°	1296	1027	979
80°	896	920	920
85°	656	798	845

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3104 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	4.9
10°-20°	137.5	13.3
20°-30°	190.1	18.3
30°-40°	202.4	19.5
40°-50°	177.8	17.2
50°-60°	134.8	13.0
60°-70°	87.5	8.5
70°-80°	43.4	4.2
80°-90°	11.4	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°	378.4	36.5
0°-40°	580.8	56.1
0°-60°	893.5	86.3
0°-90°	1035.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1035.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	547	547	547	547	547	
5°	544	543	536	538	537	52
15°	521	509	484	473	467	147
25°	468	442	406	385	375	216
35°	398	362	315	286	272	249
45°	319	274	221	182	166	246
55°	232	186	130	112	109	207
65°	136	102	77	71	70	135
75°	49	43	39	37	37	54
85°	8	10	10	10	11	10
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	546.8	546.8	546.8	546.8	546.8
2.5°	545.6	546.8	542.0	546.2	547.4
5°	544.4	543.2	536.1	537.9	537.3
7.5°	540.8	538.5	526.6	525.4	523.0
10°	536.1	530.2	513.5	509.4	505.8
12.5°	529.6	520.1	499.9	491.6	487.4
15°	520.7	508.8	483.9	472.6	467.2
17.5°	510.0	493.4	467.2	451.8	445.9
20°	497.5	477.9	447.6	429.8	422.7
22.5°	483.9	460.7	426.9	407.9	400.1
25°	467.8	442.3	406.1	385.3	375.2
27.5°	451.8	423.3	384.1	361.0	350.3
30°	435.8	403.1	360.4	335.4	324.2
32.5°	418.5	382.3	338.4	311.1	298.0
35°	398.4	361.6	314.7	286.2	271.9
37.5°	378.8	339.6	291.5	259.4	245.8
40°	360.4	318.8	268.3	233.3	219.1
42.5°	339.6	296.8	245.2	208.4	192.4
45°	318.8	274.3	221.4	181.7	165.6
47.5°	296.8	252.9	196.5	157.3	146.6
50°	277.3	230.9	174.5	138.9	131.8
52.5°	254.7	209.6	152.0	124.7	119.9
55°	232.1	186.4	130.0	112.2	108.6
57.5°	209.0	165.6	112.8	101.5	98.0
60°	184.6	144.3	99.1	90.2	88.5
62.5°	160.3	122.3	87.3	80.7	78.4
65°	136.5	101.5	76.6	70.6	69.5
67.5°	112.2	82.5	65.9	61.7	61.1
70°	89.6	67.1	55.8	53.4	52.2
72.5°	68.9	53.4	46.9	45.1	44.5
75°	48.7	42.7	38.6	37.4	36.8
77.5°	32.7	32.7	30.9	29.7	30.3
80°	22.6	23.7	23.2	23.2	23.2
82.5°	14.8	16.0	16.6	16.6	16.6
85°	8.3	9.5	10.1	10.1	10.7
87.5°	3.0	3.6	4.2	4.7	4.7
90°	0.0	0.0	0.0	0.0	0.0



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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	15.16	16.65	15.52	16.96	17.28	11.40	12.89	11.77	13.21	13.52
	3H	16.47	17.81	16.85	18.13	18.50	12.98	14.32	13.36	14.65	15.01
	4H	16.84	18.09	17.24	18.44	18.82	13.58	14.84	13.98	15.19	15.56
	6H	17.02	18.17	17.43	18.54	18.93	14.06	15.21	14.47	15.58	15.97
	8H	17.05	18.15	17.48	18.54	18.94	14.22	15.32	14.64	15.71	16.11
	12H	17.06	18.12	17.50	18.50	18.93	14.33	15.38	14.76	15.76	16.19
4H	2H	15.27	16.52	15.67	16.87	17.25	12.06	13.31	12.46	13.66	14.04
	3H	16.76	17.80	17.17	18.20	18.60	13.84	14.88	14.25	15.28	15.68
	4H	17.23	18.17	17.67	18.58	19.02	14.56	15.49	14.99	15.91	16.35
	6H	17.52	18.33	17.98	18.77	19.23	15.15	15.96	15.61	16.40	16.87
	8H	17.59	18.34	18.05	18.79	19.26	15.36	16.11	15.82	16.56	17.03
	12H	17.63	18.30	18.11	18.78	19.25	15.51	16.19	15.99	16.66	17.14
8H	4H	17.32	18.07	17.78	18.52	18.99	14.87	15.63	15.34	16.07	16.54
	6H	17.68	18.30	18.18	18.80	19.27	15.58	16.20	16.08	16.70	17.17
	8H	17.80	18.36	18.31	18.87	19.36	15.86	16.42	16.37	16.93	17.42
	12H	17.88	18.38	18.39	18.87	19.44	16.09	16.58	16.60	17.08	17.64
12H	4H	17.31	17.99	17.79	18.46	18.94	14.90	15.57	15.38	16.05	16.52
	6H	17.68	18.24	18.20	18.75	19.24	15.63	16.19	16.15	16.70	17.19
	8H	17.84	18.34	18.35	18.83	19.40	15.97	16.46	16.48	16.95	17.52