

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: P1062160

Luminaire Tested: S125RDR-H610D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062160
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-H610D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

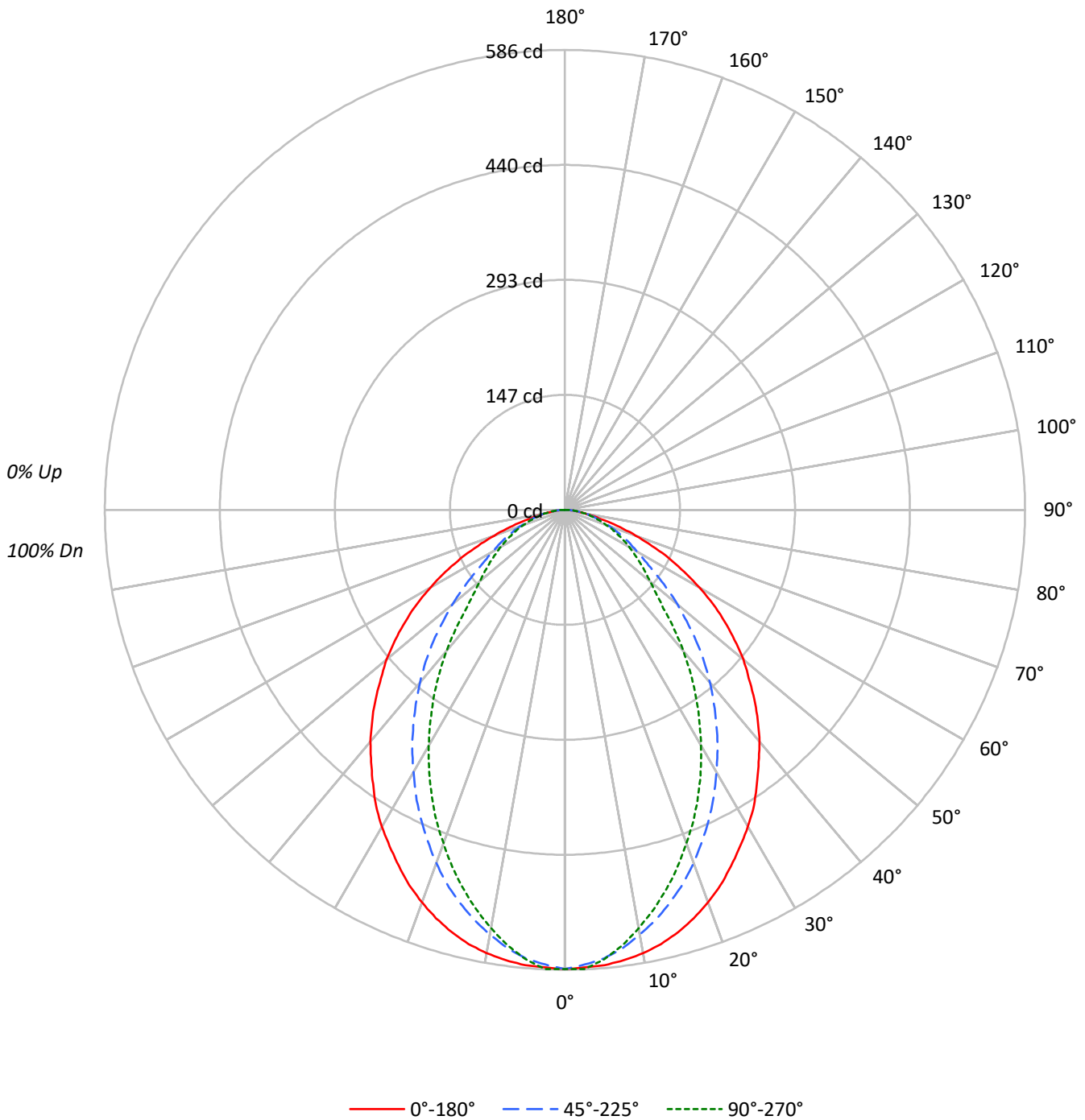
Lumens per Lamp: N/A
Luminaire Lumens: 1108.2 lumens
Efficiency: N/A
Efficacy: 63.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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					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	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°	4028	4028	4028
5°	4025	3964	3973
10°	4010	3841	3784
15°	3970	3690	3563
20°	3900	3509	3313
25°	3802	3300	3049
30°	3706	3065	2757
35°	3582	2829	2445
40°	3465	2580	2107
45°	3321	2307	1725
50°	3177	2000	1510
55°	2981	1670	1395
60°	2720	1461	1303
65°	2380	1334	1210
70°	1931	1202	1125
75°	1386	1099	1048
80°	956	983	983
85°	703	853	901

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3321 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	4.9
10°-20°	147.1	13.3
20°-30°	203.3	18.3
30°-40°	216.6	19.5
40°-50°	190.3	17.2
50°-60°	144.3	13.0
60°-70°	93.7	8.5
70°-80°	46.4	4.2
80°-90°	12.2	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°	404.8	36.5
0°-40°	621.4	56.1
0°-60°	955.9	86.3
0°-90°	1108.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1108.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	582	581	574	576	575	55
15°	557	544	518	506	500	157
25°	500	473	434	412	401	231
35°	426	387	337	306	291	267
45°	341	293	237	194	177	263
55°	248	199	139	120	116	222
65°	146	109	82	76	74	144
75°	52	46	41	40	39	58
85°	9	10	11	11	11	11
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	585.0	585.0	585.0	585.0	585.0
2.5°	583.7	585.0	579.9	584.3	585.6
5°	582.4	581.2	573.5	575.5	574.8
7.5°	578.6	576.1	563.4	562.1	559.6
10°	573.5	567.2	549.4	545.0	541.2
12.5°	566.6	556.4	534.8	525.9	521.5
15°	557.0	544.3	517.7	505.6	499.9
17.5°	545.6	527.8	499.9	483.4	477.0
20°	532.3	511.3	478.9	459.9	452.2
22.5°	517.7	492.9	456.7	436.4	428.1
25°	500.5	473.2	434.4	412.2	401.4
27.5°	483.4	452.9	410.9	386.2	374.7
30°	466.2	431.3	385.5	358.9	346.8
32.5°	447.8	409.0	362.0	332.8	318.8
35°	426.2	386.8	336.6	306.1	290.9
37.5°	405.2	363.3	311.9	277.6	263.0
40°	385.5	341.1	287.1	249.6	234.4
42.5°	363.3	317.6	262.3	222.9	205.8
45°	341.1	293.4	236.9	194.4	177.2
47.5°	317.6	270.6	210.2	168.3	156.9
50°	296.6	247.1	186.7	148.6	141.0
52.5°	272.5	224.2	162.6	133.4	128.3
55°	248.3	199.4	139.1	120.0	116.2
57.5°	223.6	177.2	120.7	108.6	104.8
60°	197.5	154.3	106.1	96.5	94.6
62.5°	171.5	130.8	93.4	86.4	83.8
65°	146.1	108.6	81.9	75.6	74.3
67.5°	120.0	88.3	70.5	66.1	65.4
70°	95.9	71.8	59.7	57.2	55.9
72.5°	73.7	57.2	50.2	48.3	47.6
75°	52.1	45.7	41.3	40.0	39.4
77.5°	34.9	34.9	33.0	31.8	32.4
80°	24.1	25.4	24.8	24.8	24.8
82.5°	15.9	17.1	17.8	17.8	17.8
85°	8.9	10.2	10.8	10.8	11.4
87.5°	3.2	3.8	4.4	5.1	5.1
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	15.39	16.88	15.76	17.20	17.51	11.63	13.13	12.00	13.44	13.75
	3H	16.70	18.04	17.08	18.37	18.73	13.22	14.56	13.60	14.88	15.25
	4H	17.07	18.33	17.47	18.68	19.06	13.82	15.07	14.22	15.42	15.80
	6H	17.25	18.41	17.66	18.77	19.16	14.29	15.45	14.71	15.82	16.21
	8H	17.29	18.39	17.71	18.78	19.18	14.45	15.55	14.88	15.94	16.35
	12H	17.30	18.35	17.73	18.73	19.16	14.57	15.62	15.00	16.00	16.43
4H	2H	15.51	16.76	15.91	17.11	17.49	12.30	13.55	12.70	13.90	14.28
	3H	16.99	18.03	17.40	18.43	18.83	14.08	15.12	14.49	15.52	15.92
	4H	17.47	18.40	17.90	18.82	19.26	14.80	15.73	15.23	16.15	16.58
	6H	17.75	18.56	18.21	19.01	19.47	15.39	16.20	15.84	16.64	17.10
	8H	17.82	18.58	18.29	19.02	19.49	15.59	16.35	16.06	16.79	17.26
	12H	17.86	18.54	18.35	19.02	19.49	15.75	16.42	16.23	16.90	17.37
8H	4H	17.55	18.31	18.02	18.75	19.22	15.11	15.86	15.57	16.31	16.78
	6H	17.91	18.54	18.41	19.03	19.51	15.82	16.44	16.31	16.93	17.41
	8H	18.03	18.59	18.54	19.10	19.59	16.09	16.66	16.61	17.17	17.65
	12H	18.12	18.61	18.63	19.10	19.67	16.32	16.82	16.83	17.31	17.88
12H	4H	17.55	18.22	18.03	18.70	19.17	15.13	15.81	15.62	16.29	16.76
	6H	17.92	18.48	18.43	18.99	19.48	15.87	16.43	16.38	16.94	17.43
	8H	18.08	18.57	18.59	19.06	19.63	16.20	16.70	16.71	17.19	17.76