

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



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1175375

Luminaire Tested: S125RDRP-S610D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1175375  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D835-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

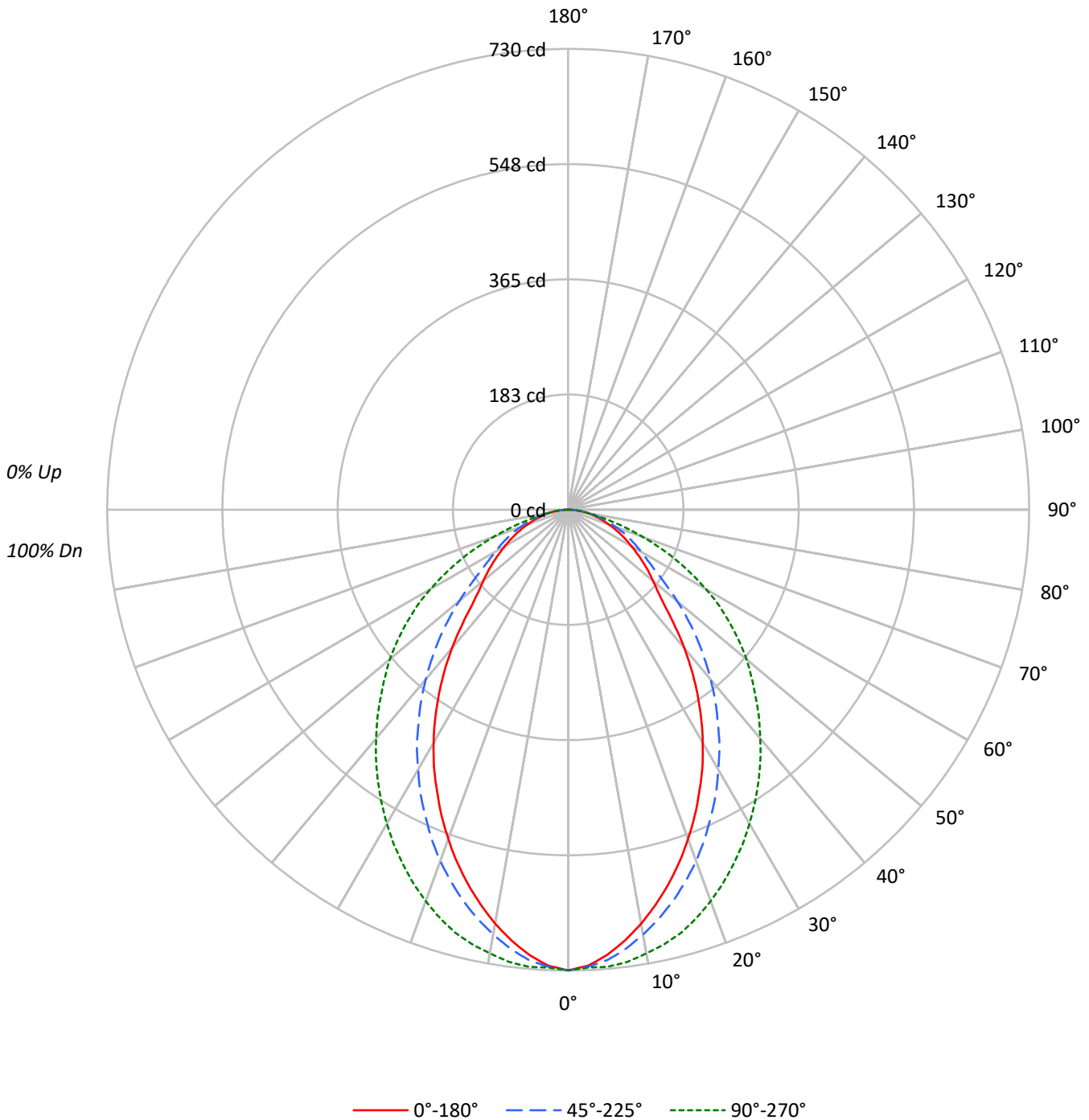
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1374.6 lumens  
Efficiency: N/A  
Efficacy: 70.1 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5024	5024	5024
5°	4893	4949	5022
10°	4656	4777	4989
15°	4375	4574	4941
20°	4067	4338	4834
25°	3736	4066	4706
30°	3388	3777	4565
35°	2999	3472	4415
40°	2572	3157	4253
45°	2111	2810	4090
50°	1878	2415	3947
55°	1732	2023	3748
60°	1595	1842	3472
65°	1484	1735	3068
70°	1385	1621	2506
75°	1301	1500	1878
80°	1229	1376	1352
85°	1122	1367	1122

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4090 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.6	4.9
10°-20°	182.1	13.2
20°-30°	250.5	18.2
30°-40°	265.7	19.3
40°-50°	232.5	16.9
50°-60°	178.4	13.0
60°-70°	118.9	8.6
70°-80°	60.9	4.4
80°-90°	18.1	1.3
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°	500.1	36.4
0°-40°	765.8	55.7
0°-60°	1176.7	85.6
0°-90°	1374.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1374.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	708	717	716	721	727	66
15°	614	628	642	672	693	172
25°	492	508	535	580	619	226
35°	357	374	413	474	525	222
45°	217	235	289	360	420	171
55°	144	147	168	250	312	129
65°	91	92	106	140	188	91
75°	49	52	56	60	71	52
85°	14	16	17	17	14	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	729.7	729.7	729.7	729.7	729.7
2.5°	722.8	730.3	724.7	725.3	725.9
5°	708.0	717.3	716.0	721.0	726.6
7.5°	688.2	698.1	701.2	713.6	722.2
10°	665.9	677.0	683.2	701.8	713.6
12.5°	640.5	653.5	663.4	687.5	704.9
15°	613.8	628.1	641.7	672.1	693.1
17.5°	585.3	599.6	617.5	652.2	677.6
20°	555.0	570.5	592.1	629.3	659.7
22.5°	524.0	540.1	564.9	605.8	640.5
25°	491.8	508.5	535.2	580.4	619.4
27.5°	460.2	475.7	506.7	555.0	597.7
30°	426.1	442.3	475.1	528.3	574.2
32.5°	392.1	408.2	446.0	501.7	550.0
35°	356.8	373.5	413.1	473.8	525.3
37.5°	321.5	338.8	382.8	445.3	499.9
40°	286.2	304.7	351.2	416.9	473.2
42.5°	250.2	270.1	319.0	389.0	447.2
45°	216.8	234.8	288.6	360.5	420.0
47.5°	192.6	203.2	256.4	331.4	393.9
50°	175.3	180.2	225.5	303.5	368.5
52.5°	159.8	162.9	195.1	277.5	340.7
55°	144.3	147.4	168.5	250.2	312.2
57.5°	129.5	131.3	148.7	223.0	283.7
60°	115.8	117.1	133.8	195.7	252.1
62.5°	103.4	104.1	119.5	167.9	220.5
65°	91.1	91.7	106.5	140.0	188.3
67.5°	79.9	79.9	94.1	114.6	157.3
70°	68.8	68.8	80.5	92.9	124.5
72.5°	58.8	60.1	68.1	74.9	97.2
75°	48.9	52.0	56.4	59.5	70.6
77.5°	39.6	43.4	45.2	46.5	47.1
80°	31.0	33.4	34.7	35.3	34.1
82.5°	22.9	24.8	25.4	25.4	23.5
85°	14.2	16.1	17.3	16.7	14.2
87.5°	6.8	9.3	9.9	8.7	6.8
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	12.22	13.72	12.59	14.04	14.35	16.25	17.75	16.61	18.06	18.38
	3H	13.81	15.16	14.19	15.48	15.85	17.64	18.98	18.01	19.31	19.67
	4H	14.45	15.71	14.85	16.06	16.44	18.04	19.30	18.44	19.65	20.03
	6H	14.96	16.13	15.38	16.49	16.89	18.25	19.41	18.66	19.78	20.17
	8H	15.14	16.25	15.57	16.64	17.04	18.31	19.41	18.73	19.80	20.20
	12H	15.27	16.33	15.70	16.71	17.14	18.34	19.40	18.77	19.78	20.21
4H	2H	12.99	14.25	13.39	14.60	14.98	16.38	17.64	16.78	17.99	18.37
	3H	14.78	15.82	15.19	16.22	16.62	17.95	18.99	18.36	19.39	19.80
	4H	15.54	16.48	15.98	16.90	17.34	18.46	19.40	18.89	19.82	20.25
	6H	16.18	17.00	16.64	17.44	17.90	18.78	19.60	19.24	20.05	20.51
	8H	16.41	17.18	16.88	17.62	18.09	18.88	19.65	19.35	20.09	20.56
	12H	16.58	17.27	17.07	17.75	18.22	18.96	19.64	19.44	20.12	20.59
8H	4H	15.93	16.69	16.39	17.14	17.60	18.56	19.32	19.02	19.77	20.24
	6H	16.70	17.34	17.20	17.83	18.31	18.98	19.61	19.47	20.10	20.58
	8H	17.02	17.59	17.53	18.10	18.59	19.14	19.70	19.65	20.21	20.70
	12H	17.28	17.78	17.79	18.28	18.84	19.27	19.78	19.78	20.27	20.83
12H	4H	15.97	16.65	16.45	17.13	17.60	18.56	19.24	19.04	19.72	20.19
	6H	16.78	17.35	17.29	17.86	18.35	18.99	19.56	19.50	20.07	20.56
	8H	17.16	17.66	17.67	18.16	18.72	19.20	19.70	19.71	20.19	20.76