

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: P1175421

Luminaire Tested: S125RDRP-H610D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1175421  
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-H610D840-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

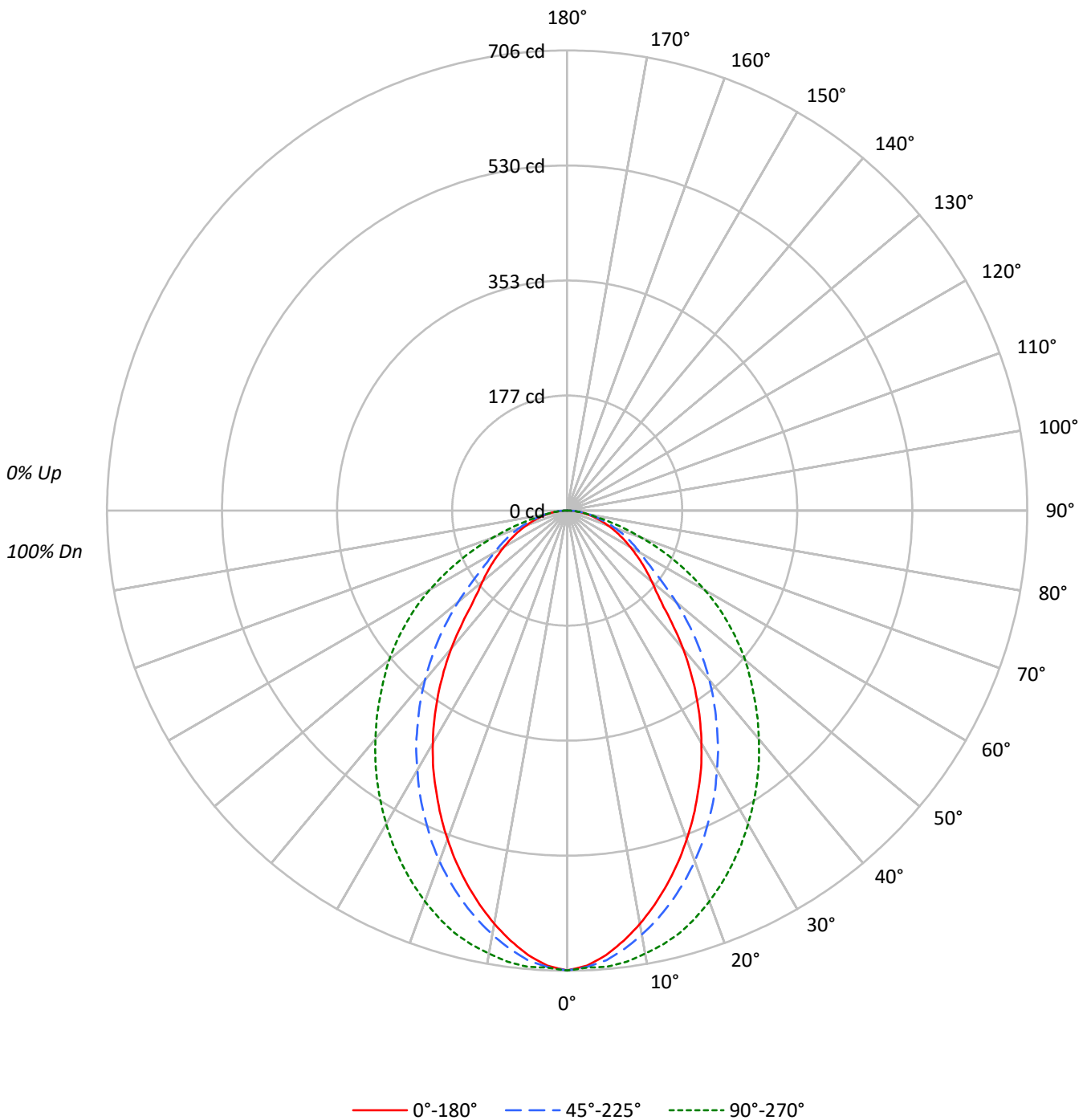
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1329.2 lumens  
Efficiency: N/A  
Efficacy: 76.4 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): 17.4  
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°	4858	4858	4858
5°	4732	4786	4855
10°	4501	4619	4824
15°	4231	4423	4777
20°	3932	4196	4674
25°	3612	3931	4550
30°	3276	3652	4414
35°	2900	3358	4269
40°	2487	3052	4113
45°	2041	2718	3954
50°	1816	2335	3818
55°	1675	1955	3624
60°	1542	1782	3357
65°	1434	1678	2967
70°	1339	1568	2424
75°	1258	1450	1817
80°	1186	1328	1305
85°	1090	1327	1090

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3954 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.3	4.9
10°-20°	176.1	13.2
20°-30°	242.2	18.2
30°-40°	256.9	19.3
40°-50°	224.8	16.9
50°-60°	172.5	13.0
60°-70°	114.9	8.6
70°-80°	58.9	4.4
80°-90°	17.5	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°	483.6	36.4
0°-40°	740.5	55.7
0°-60°	1137.8	85.6
0°-90°	1329.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1329.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	706	706	706	706	706	
5°	685	694	692	697	702	64
15°	594	607	620	650	670	166
25°	476	492	518	561	599	218
35°	345	361	400	458	508	215
45°	210	227	279	349	406	166
55°	140	142	163	242	302	125
65°	88	89	103	135	182	88
75°	47	50	54	58	68	50
85°	14	16	17	16	14	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	705.5	705.5	705.5	705.5	705.5
2.5°	698.9	706.1	700.7	701.3	701.9
5°	684.6	693.6	692.4	697.2	702.5
7.5°	665.4	675.0	678.0	690.0	698.3
10°	643.8	654.6	660.6	678.6	690.0
12.5°	619.3	631.9	641.5	664.8	681.6
15°	593.5	607.3	620.5	649.8	670.2
17.5°	566.0	579.8	597.1	630.7	655.2
20°	536.6	551.6	572.6	608.5	637.9
22.5°	506.7	522.3	546.2	585.8	619.3
25°	475.5	491.7	517.5	561.2	598.9
27.5°	445.0	460.0	489.9	536.6	578.0
30°	412.1	427.6	459.4	510.9	555.2
32.5°	379.1	394.7	431.2	485.1	531.8
35°	345.0	361.2	399.5	458.2	507.9
37.5°	310.8	327.6	370.1	430.6	483.3
40°	276.7	294.7	339.6	403.1	457.6
42.5°	242.0	261.1	308.4	376.1	432.4
45°	209.6	227.0	279.1	348.6	406.1
47.5°	186.3	196.4	248.0	320.4	380.9
50°	169.5	174.3	218.0	293.5	356.4
52.5°	154.5	157.5	188.7	268.3	329.4
55°	139.5	142.5	162.9	242.0	301.9
57.5°	125.2	127.0	143.7	215.6	274.3
60°	112.0	113.2	129.4	189.3	243.8
62.5°	100.0	100.6	115.6	162.3	213.2
65°	88.0	88.6	103.0	135.4	182.1
67.5°	77.3	77.3	91.0	110.8	152.1
70°	66.5	66.5	77.9	89.8	120.4
72.5°	56.9	58.1	65.9	72.5	94.0
75°	47.3	50.3	54.5	57.5	68.3
77.5°	38.3	41.9	43.7	44.9	45.5
80°	29.9	32.3	33.5	34.1	32.9
82.5°	22.2	24.0	24.6	24.6	22.8
85°	13.8	15.6	16.8	16.2	13.8
87.5°	6.6	9.0	9.6	8.4	6.6
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	12.11	13.61	12.47	13.92	14.24	16.13	17.63	16.50	17.94	18.26
	3H	13.70	15.04	14.07	15.37	15.73	17.52	18.86	17.90	19.19	19.55
	4H	14.34	15.60	14.74	15.95	16.33	17.92	19.19	18.32	19.53	19.91
	6H	14.85	16.01	15.26	16.38	16.77	18.13	19.29	18.54	19.66	20.05
	8H	15.03	16.14	15.45	16.53	16.93	18.19	19.30	18.61	19.69	20.09
	12H	15.15	16.21	15.58	16.60	17.03	18.22	19.28	18.65	19.66	20.09
4H	2H	12.88	14.14	13.28	14.49	14.87	16.26	17.52	16.66	17.87	18.25
	3H	14.66	15.71	15.07	16.11	16.51	17.83	18.88	18.24	19.28	19.68
	4H	15.43	16.37	15.86	16.79	17.22	18.34	19.28	18.77	19.70	20.14
	6H	16.07	16.88	16.52	17.33	17.79	18.67	19.49	19.12	19.93	20.39
	8H	16.30	17.06	16.76	17.51	17.97	18.77	19.53	19.23	19.98	20.44
	12H	16.47	17.15	16.95	17.63	18.10	18.84	19.52	19.32	20.00	20.47
8H	4H	15.81	16.58	16.27	17.02	17.49	18.44	19.21	18.91	19.65	20.12
	6H	16.59	17.22	17.08	17.71	18.19	18.86	19.49	19.36	19.98	20.46
	8H	16.90	17.47	17.42	17.98	18.47	19.02	19.59	19.53	20.10	20.59
	12H	17.17	17.67	17.68	18.16	18.73	19.16	19.66	19.67	20.15	20.72
12H	4H	15.85	16.53	16.33	17.01	17.48	18.44	19.12	18.92	19.60	20.07
	6H	16.66	17.23	17.18	17.74	18.23	18.87	19.44	19.39	19.95	20.44
	8H	17.05	17.55	17.56	18.04	18.61	19.08	19.58	19.59	20.08	20.64