

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: P1175398

Luminaire Tested: S125RDRP-H1090D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1175398  
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-H1090D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

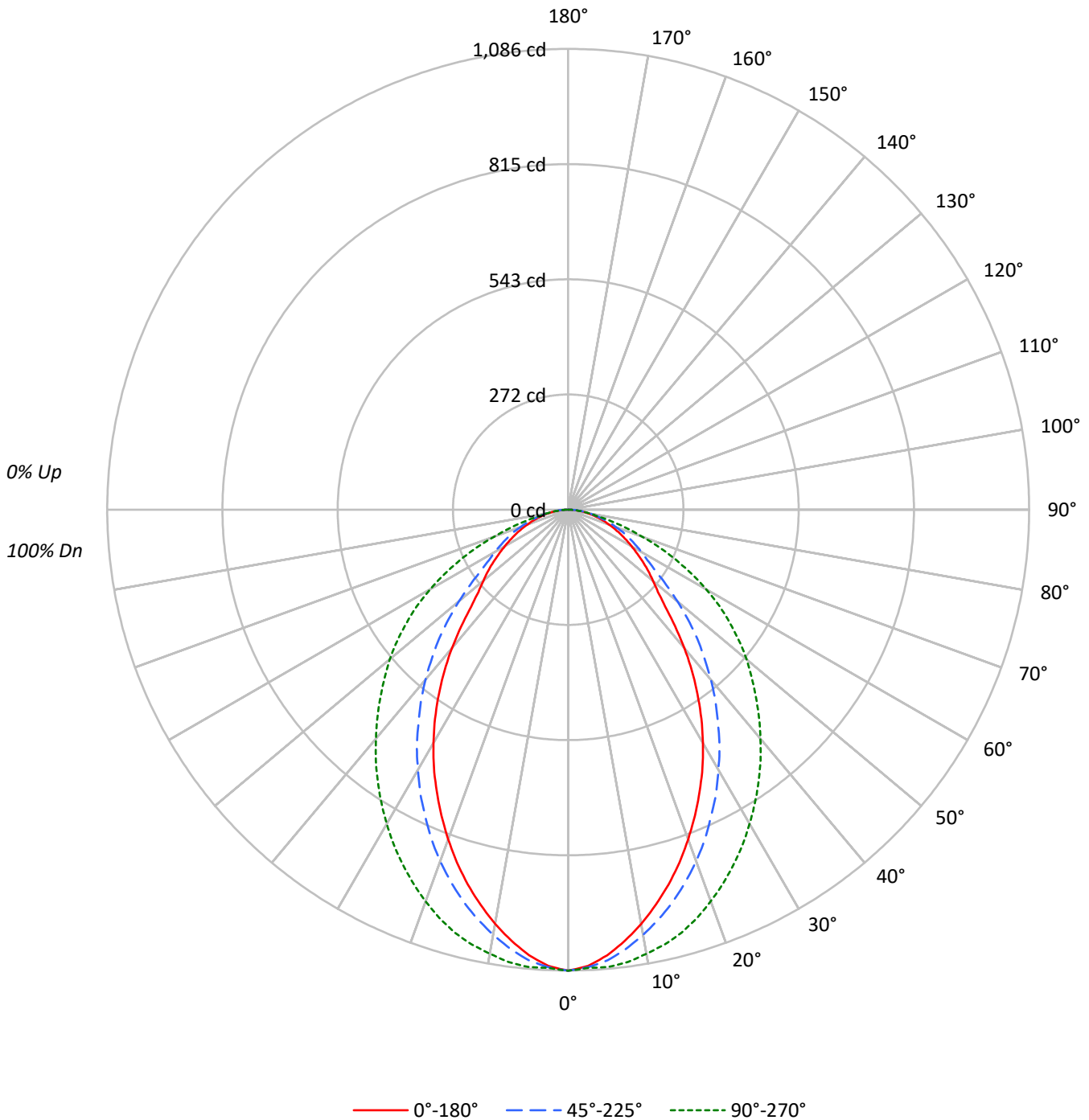
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2046.8 lumens  
Efficiency: N/A  
Efficacy: 65.6 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): 31.2  
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°	7480	7480	7480
5°	7286	7368	7477
10°	6931	7112	7428
15°	6515	6811	7356
20°	6055	6460	7197
25°	5563	6053	7007
30°	5045	5624	6797
35°	4465	5171	6574
40°	3830	4700	6333
45°	3143	4185	6089
50°	2796	3596	5878
55°	2580	3012	5579
60°	2375	2743	5169
65°	2209	2584	4568
70°	2061	2414	3732
75°	1939	2232	2796
80°	1828	2046	2010
85°	1675	2038	1675

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6089 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.6	4.9
10°-20°	271.1	13.2
20°-30°	373.0	18.2
30°-40°	395.6	19.3
40°-50°	346.2	16.9
50°-60°	265.7	13.0
60°-70°	177.0	8.6
70°-80°	90.7	4.4
80°-90°	26.9	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°	744.7	36.4
0°-40°	1140.2	55.7
0°-60°	1752.1	85.6
0°-90°	2046.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2046.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1086	1086	1086	1086	1086	
5°	1054	1068	1066	1074	1082	99
15°	914	935	956	1001	1032	256
25°	732	757	797	864	922	336
35°	531	556	615	706	782	331
45°	323	350	430	537	625	255
55°	215	220	251	373	465	193
65°	136	136	159	208	280	135
75°	73	78	84	88	105	77
85°	21	24	26	25	21	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1086.4	1086.4	1086.4	1086.4	1086.4
2.5°	1076.3	1087.4	1079.1	1080.0	1080.9
5°	1054.2	1068.0	1066.1	1073.5	1081.8
7.5°	1024.6	1039.4	1044.0	1062.5	1075.4
10°	991.4	1008.0	1017.3	1044.9	1062.5
12.5°	953.6	973.0	987.8	1023.7	1049.5
15°	914.0	935.2	955.5	1000.7	1032.0
17.5°	871.5	892.8	919.5	971.2	1009.0
20°	826.4	849.4	881.7	937.0	982.2
22.5°	780.2	804.2	841.1	902.0	953.6
25°	732.3	757.2	796.8	864.2	922.3
27.5°	685.2	708.3	754.4	826.4	890.0
30°	634.5	658.5	707.4	786.7	854.9
32.5°	583.8	607.8	664.0	747.0	819.0
35°	531.2	556.1	615.2	705.5	782.1
37.5°	478.7	504.5	570.0	663.1	744.3
40°	426.1	453.8	522.9	620.7	704.6
42.5°	372.6	402.1	475.0	579.2	665.9
45°	322.8	349.5	429.8	536.8	625.3
47.5°	286.8	302.5	381.8	493.4	586.6
50°	261.0	268.4	335.7	451.9	548.8
52.5°	237.9	242.6	290.5	413.2	507.3
55°	214.9	219.5	250.9	372.6	464.8
57.5°	192.8	195.5	221.3	332.0	422.4
60°	172.5	174.3	199.2	291.4	375.4
62.5°	154.0	154.9	178.0	249.9	328.3
65°	135.6	136.5	158.6	208.4	280.4
67.5°	119.0	119.0	140.2	170.6	234.3
70°	102.4	102.4	119.9	138.3	185.4
72.5°	87.6	89.5	101.5	111.6	144.8
75°	72.9	77.5	83.9	88.5	105.1
77.5°	59.0	64.6	67.3	69.2	70.1
80°	46.1	49.8	51.6	52.6	50.7
82.5°	34.1	36.9	37.8	37.8	35.0
85°	21.2	24.0	25.8	24.9	21.2
87.5°	10.1	13.8	14.8	12.9	10.1
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	13.61	15.11	13.97	15.42	15.73	17.63	19.13	18.00	19.44	19.76
	3H	15.19	16.54	15.57	16.87	17.23	19.02	20.36	19.40	20.69	21.05
	4H	15.84	17.10	16.24	17.45	17.83	19.42	20.69	19.82	21.03	21.41
	6H	16.35	17.51	16.76	17.88	18.27	19.63	20.79	20.04	21.16	21.55
	8H	16.53	17.64	16.95	18.03	18.43	19.69	20.80	20.11	21.19	21.59
	12H	16.65	17.71	17.08	18.10	18.53	19.72	20.78	20.15	21.16	21.59
4H	2H	14.38	15.64	14.78	15.98	16.36	17.76	19.02	18.16	19.37	19.75
	3H	16.16	17.21	16.57	17.61	18.01	19.33	20.38	19.74	20.78	21.18
	4H	16.93	17.87	17.36	18.28	18.72	19.84	20.78	20.27	21.20	21.64
	6H	17.57	18.39	18.02	18.83	19.29	20.17	20.99	20.62	21.43	21.89
	8H	17.80	18.56	18.26	19.01	19.47	20.27	21.03	20.73	21.48	21.94
	12H	17.97	18.65	18.45	19.13	19.60	20.34	21.02	20.82	21.50	21.97
8H	4H	17.31	18.08	17.77	18.52	18.99	19.94	20.71	20.40	21.15	21.62
	6H	18.09	18.72	18.58	19.21	19.69	20.36	20.99	20.86	21.48	21.96
	8H	18.40	18.97	18.92	19.48	19.97	20.52	21.09	21.03	21.60	22.09
	12H	18.67	19.17	19.18	19.66	20.22	20.66	21.16	21.17	21.65	22.22
12H	4H	17.35	18.03	17.83	18.51	18.98	19.94	20.62	20.42	21.10	21.57
	6H	18.16	18.73	18.68	19.24	19.73	20.37	20.94	20.89	21.45	21.94
	8H	18.55	19.05	19.06	19.54	20.11	20.58	21.08	21.09	21.58	22.14