

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: P1061900

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061900  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H1090D935-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

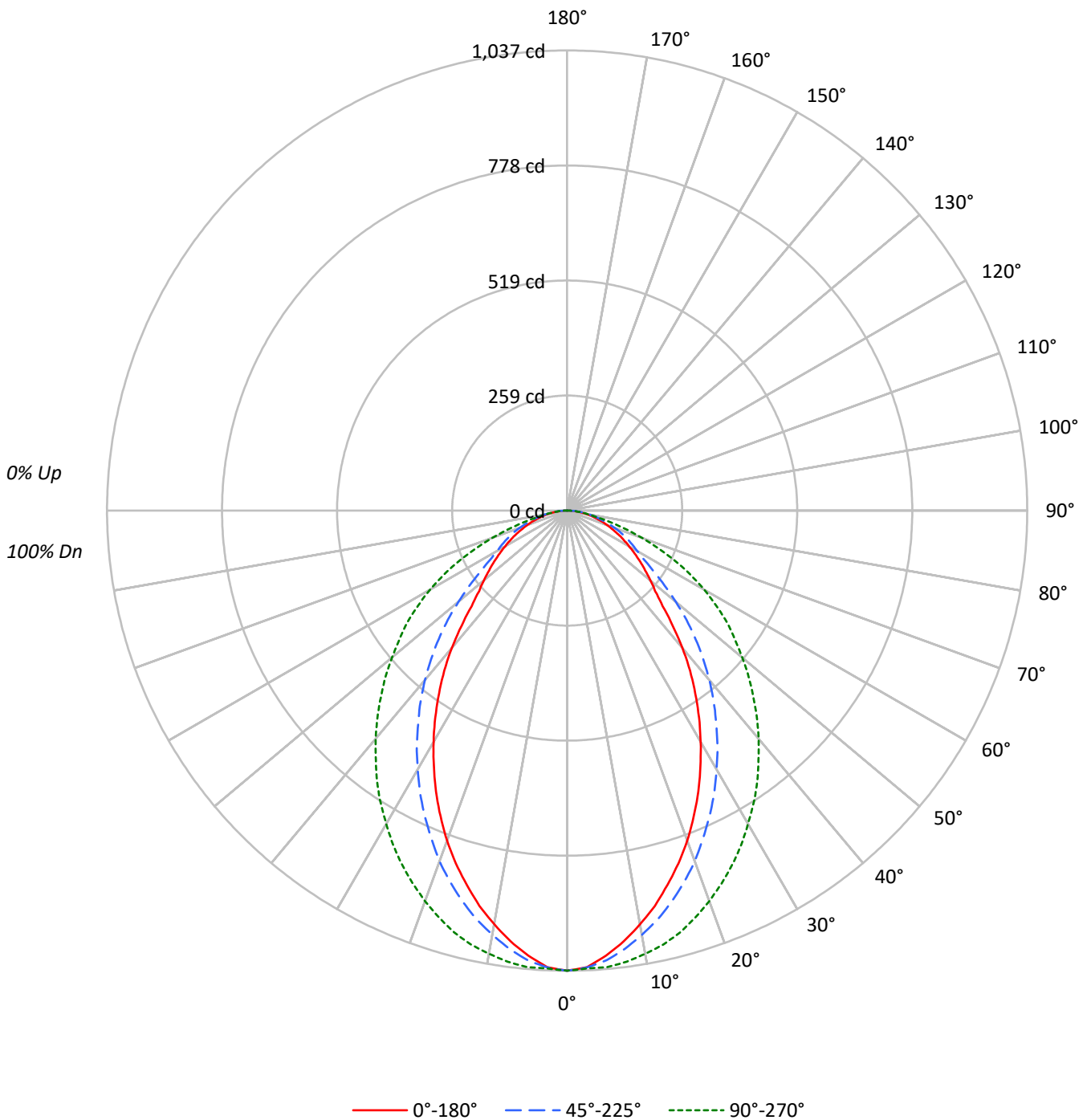
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1943.8 lumens  
Efficiency: N/A  
Efficacy: 62.3 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	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	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	48	59	52	47	58	52	47	56	51	46	44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

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

	0°	45°	90°
0°	7139	7139	7139
5°	6959	7030	7138
10°	6619	6786	7090
15°	6224	6497	7014
20°	5799	6163	6861
25°	5312	5768	6689
30°	4785	5353	6481
35°	4231	4919	6277
40°	3631	4478	6033
45°	2965	3984	5779
50°	2630	3417	5514
55°	2413	2835	5284
60°	2225	2510	4922
65°	2076	2413	4387
70°	1939	2293	3587
75°	1790	2149	2644
80°	1685	2014	1931
85°	1556	1967	1635

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5779 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.9	4.9
10°-20°	258.5	13.3
20°-30°	355.2	18.3
30°-40°	376.5	19.4
40°-50°	328.6	16.9
50°-60°	249.7	12.8
60°-70°	167.3	8.6
70°-80°	86.3	4.4
80°-90°	25.9	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°	709.6	36.5
0°-40°	1086.1	55.9
0°-60°	1664.4	85.6
0°-90°	1943.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	1007	1017	1017	1024	1033	94
15°	873	890	912	952	984	245
25°	699	721	759	822	880	321
35°	503	532	585	668	747	314
45°	304	335	409	506	594	240
55°	201	207	236	347	440	180
65°	127	130	148	198	269	126
75°	67	72	81	86	99	72
85°	20	25	25	23	21	22
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1036.9	1036.9	1036.9	1036.9	1036.9
2.5°	1029.6	1036.9	1030.6	1030.6	1032.7
5°	1006.8	1017.2	1017.2	1024.4	1032.7
7.5°	978.9	990.3	996.5	1013.0	1025.5
10°	946.7	959.2	970.6	995.4	1014.1
12.5°	912.6	926.0	943.6	975.8	1001.6
15°	873.2	889.8	911.5	951.9	984.0
17.5°	833.8	850.4	877.3	925.0	961.2
20°	791.4	809.0	841.1	892.9	936.4
22.5°	745.8	765.5	799.7	858.7	909.5
25°	699.2	720.9	759.3	822.4	880.5
27.5°	650.5	676.4	717.8	785.2	849.4
30°	601.8	627.7	673.3	746.8	815.2
32.5°	553.1	581.1	630.8	708.5	782.1
35°	503.4	532.4	585.2	668.1	746.8
37.5°	454.7	483.7	542.8	628.7	708.5
40°	404.0	434.0	498.2	588.4	671.2
42.5°	352.2	384.3	453.7	546.9	632.9
45°	304.5	334.6	409.2	506.5	593.5
47.5°	269.3	289.0	364.6	465.1	555.2
50°	245.5	255.8	319.0	424.7	514.8
52.5°	221.7	230.0	276.6	383.3	476.5
55°	201.0	207.2	236.2	347.0	440.2
57.5°	180.2	186.4	205.1	310.7	397.8
60°	161.6	166.8	182.3	272.4	357.4
62.5°	144.0	148.1	164.7	236.2	313.9
65°	127.4	130.5	148.1	197.8	269.3
67.5°	110.8	113.9	131.6	161.6	221.7
70°	96.3	97.4	113.9	131.6	178.2
72.5°	81.8	82.9	96.3	106.7	136.7
75°	67.3	71.5	80.8	86.0	99.4
77.5°	54.9	60.1	65.3	67.3	67.3
80°	42.5	48.7	50.8	50.8	48.7
82.5°	31.1	36.3	37.3	35.2	33.1
85°	19.7	24.9	24.9	22.8	20.7
87.5°	9.3	13.5	13.5	12.4	9.3
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	13.43	14.93	13.80	15.24	15.56	17.36	18.86	17.73	19.17	19.49
	3H	15.01	16.35	15.38	16.68	17.04	18.79	20.13	19.16	20.46	20.82
	4H	15.62	16.88	16.02	17.23	17.61	19.20	20.46	19.60	20.81	21.19
	6H	16.11	17.28	16.53	17.64	18.04	19.42	20.58	19.83	20.95	21.34
	8H	16.29	17.40	16.72	17.79	18.19	19.48	20.58	19.90	20.97	21.37
	12H	16.41	17.47	16.84	17.85	18.28	19.51	20.57	19.94	20.95	21.38
4H	2H	14.17	15.43	14.57	15.78	16.16	17.49	18.75	17.89	19.10	19.48
	3H	15.95	17.00	16.36	17.40	17.80	19.10	20.14	19.51	20.54	20.95
	4H	16.69	17.63	17.12	18.04	18.48	19.63	20.57	20.06	20.98	21.42
	6H	17.32	18.14	17.78	18.58	19.04	19.97	20.79	20.43	21.23	21.69
	8H	17.55	18.32	18.02	18.76	19.23	20.07	20.83	20.53	21.28	21.74
	12H	17.73	18.41	18.21	18.89	19.36	20.14	20.82	20.62	21.30	21.77
8H	4H	17.09	17.85	17.55	18.30	18.76	19.73	20.50	20.20	20.94	21.41
	6H	17.87	18.51	18.37	19.00	19.48	20.17	20.80	20.67	21.30	21.77
	8H	18.20	18.77	18.71	19.28	19.77	20.33	20.90	20.84	21.41	21.90
	12H	18.47	18.98	18.98	19.47	20.03	20.47	20.97	20.98	21.46	22.02
12H	4H	17.13	17.81	17.61	18.29	18.76	19.73	20.42	20.22	20.89	21.37
	6H	17.96	18.53	18.47	19.04	19.52	20.19	20.76	20.70	21.27	21.75
	8H	18.35	18.86	18.86	19.35	19.91	20.40	20.90	20.91	21.39	21.96