

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: P1061499

Luminaire Tested: S125RDRP-S1090D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061499  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D940-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

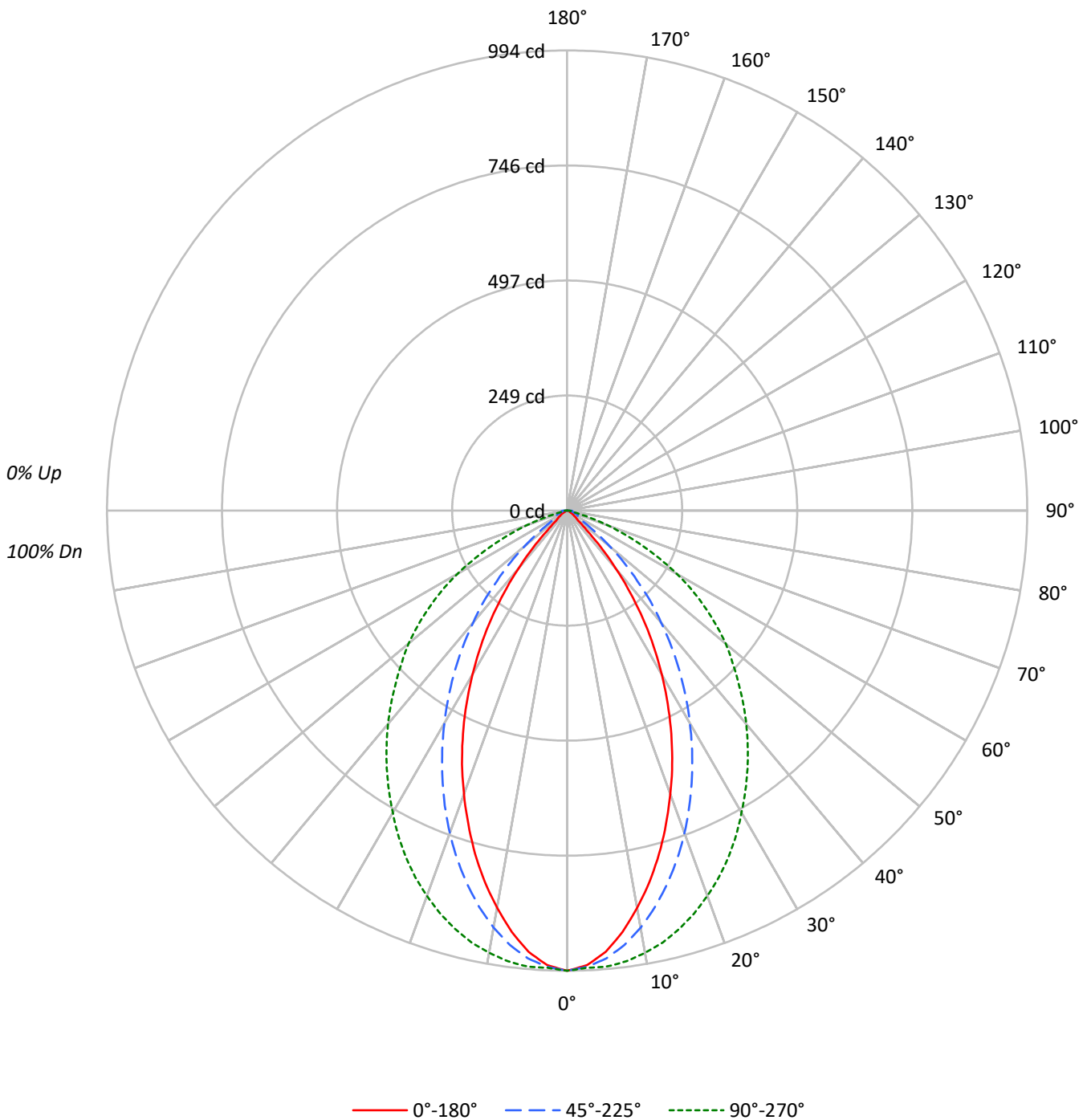
Lumens per Lamp: N/A  
Luminaire Lumens: 1286.0 lumens  
Efficiency: N/A  
Efficacy: 36.7 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59					59			
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53					53			
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45					45			
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38					38			

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

	0°	45°	90°
0°	6844	6844	6844
5°	6611	6710	6832
10°	6092	6394	6780
15°	5472	5952	6668
20°	4775	5430	6490
25°	4045	4842	6268
30°	3249	4215	5989
35°	2405	3555	5710
40°	1489	2839	5411
45°	580	2076	5087
50°	272	1301	4791
55°	199	557	4349
60°	136	395	3772
65°	90	414	2933
70°	89	378	1846
75°	117	383	588
80°	174	436	393
85°	261	869	608

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5087 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.2	7.1
10°-20°	236.2	18.4
20°-30°	300.8	23.4
30°-40°	280.0	21.8
40°-50°	192.7	15.0
50°-60°	109.1	8.5
60°-70°	51.5	4.0
70°-80°	16.1	1.3
80°-90°	8.4	0.7
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°	628.2	48.8
0°-40°	908.2	70.6
0°-60°	1210.0	94.1
0°-90°	1286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1286.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	994	994	994	994	994	
5°	956	970	971	980	988	89
15°	768	793	835	898	936	214
25°	532	567	637	744	825	243
35°	286	326	423	568	679	177
45°	60	95	213	386	522	56
55°	17	19	46	222	362	15
65°	6	7	25	80	180	6
75°	4	10	14	16	22	5
85°	3	9	11	10	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	994.0	994.0	994.0	994.0	994.0
2.5°	983.0	992.9	986.3	987.4	988.5
5°	956.5	969.7	970.9	979.7	988.5
7.5°	917.8	934.4	946.6	967.5	981.9
10°	871.4	891.3	914.5	948.8	969.7
12.5°	821.7	844.9	877.0	925.6	955.4
15°	767.6	793.0	835.0	898.0	935.5
17.5°	710.2	738.9	789.7	864.8	912.3
20°	651.7	682.6	741.1	827.3	885.8
22.5°	593.1	625.1	690.3	786.4	857.1
25°	532.4	566.6	637.3	744.4	825.1
27.5°	470.5	505.9	584.3	701.4	790.8
30°	408.7	446.2	530.2	657.2	753.3
32.5°	347.9	385.5	477.1	613.0	716.8
35°	286.1	325.8	423.0	567.7	679.3
37.5°	224.2	267.3	370.0	521.3	640.6
40°	165.7	206.5	315.9	476.0	602.0
42.5°	110.4	150.2	267.3	430.8	562.2
45°	59.6	95.0	213.2	385.5	522.4
47.5°	32.0	50.8	166.8	341.3	483.8
50°	25.4	28.7	121.5	300.4	447.3
52.5°	21.0	23.2	79.5	261.8	405.4
55°	16.6	18.8	46.4	222.0	362.3
57.5°	13.3	15.5	29.8	184.5	320.3
60°	9.9	12.1	28.7	148.0	273.9
62.5°	7.7	8.8	26.5	113.8	225.3
65°	5.5	6.6	25.4	79.5	180.0
67.5°	4.4	5.5	23.2	50.8	134.7
70°	4.4	4.4	18.8	33.1	91.7
72.5°	4.4	7.7	16.6	22.1	55.2
75°	4.4	9.9	14.4	15.5	22.1
77.5°	4.4	11.0	12.1	12.1	12.1
80°	4.4	9.9	11.0	11.0	9.9
82.5°	4.4	8.8	9.9	11.0	8.8
85°	3.3	8.8	11.0	9.9	7.7
87.5°	3.3	8.8	9.9	8.8	5.5
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	0.00	0.00	0.00	0.00	0.00	15.93	17.22	16.29	17.53	17.85
	3H	0.00	0.00	0.00	0.00	0.00	16.65	17.79	17.03	18.12	18.49
	4H	0.00	0.06	0.00	0.41	0.80	16.67	17.73	17.07	18.09	18.47
	6H	0.25	1.23	0.67	1.60	1.99	16.62	17.60	17.04	17.97	18.36
	8H	0.89	1.82	1.32	2.21	2.61	16.60	17.52	17.03	17.91	18.32
	12H	1.48	2.36	1.91	2.74	3.18	16.58	17.46	17.01	17.85	18.28
4H	2H	0.44	1.51	0.85	1.86	2.24	15.72	16.78	16.12	17.13	17.52
	3H	1.25	2.12	1.67	2.52	2.93	16.48	17.34	16.89	17.75	18.15
	4H	2.25	3.03	2.69	3.45	3.89	16.51	17.28	16.94	17.70	18.14
	6H	3.52	4.19	3.99	4.64	5.11	16.48	17.15	16.95	17.60	18.06
	8H	4.10	4.73	4.57	5.17	5.64	16.47	17.09	16.94	17.54	18.01
	12H	4.66	5.21	5.15	5.70	6.17	16.47	17.02	16.96	17.51	17.98
8H	4H	3.67	4.29	4.14	4.74	5.21	16.39	17.01	16.86	17.46	17.93
	6H	5.22	5.73	5.72	6.23	6.71	16.38	16.88	16.88	17.38	17.86
	8H	6.01	6.47	6.53	6.98	7.48	16.39	16.84	16.91	17.36	17.85
	12H	6.85	7.25	7.36	7.75	8.32	16.45	16.85	16.96	17.35	17.92
12H	4H	3.89	4.44	4.37	4.92	5.39	16.35	16.90	16.83	17.38	17.85
	6H	5.59	6.05	6.11	6.56	7.06	16.33	16.79	16.85	17.30	17.80
	8H	6.58	6.98	7.09	7.48	8.05	16.38	16.78	16.89	17.28	17.85