

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: P1061504

Luminaire Tested: S125RDRP-S1090D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061504  
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-S1090D940-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

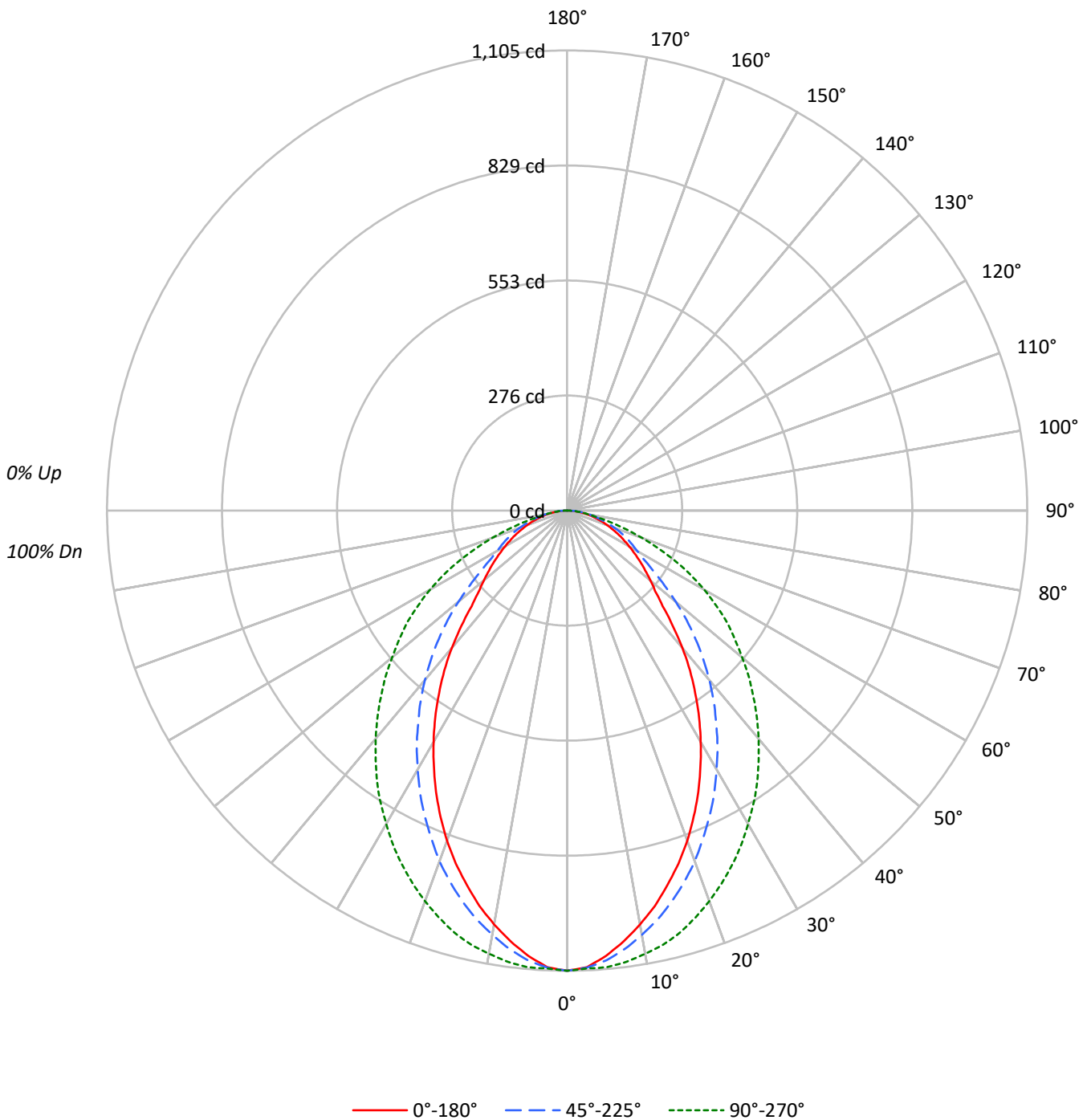
Lumens per Lamp: N/A  
Luminaire Lumens: 2071.5 lumens  
Efficiency: N/A  
Efficacy: 59.2 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86												86																
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74												74																
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64												64																
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56												56																
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50												50																
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44												44																
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40												40																
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36												36																
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33												33																
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30												30																

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

	0°	45°	90°
0°	7608	7608	7608
5°	7416	7492	7607
10°	7054	7231	7556
15°	6633	6924	7475
20°	6180	6568	7312
25°	5661	6148	7128
30°	5099	5704	6907
35°	4509	5242	6690
40°	3869	4773	6429
45°	3160	4245	6159
50°	2802	3642	5876
55°	2571	3021	5632
60°	2371	2676	5244
65°	2212	2572	4676
70°	2067	2444	3823
75°	1910	2290	2820
80°	1796	2145	2058
85°	1659	2093	1746

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6159 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.3	4.9
10°-20°	275.4	13.3
20°-30°	378.6	18.3
30°-40°	401.2	19.4
40°-50°	350.2	16.9
50°-60°	266.1	12.8
60°-70°	178.3	8.6
70°-80°	91.9	4.4
80°-90°	27.6	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°	756.3	36.5
0°-40°	1157.5	55.9
0°-60°	1773.7	85.6
0°-90°	2071.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2071.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1073	1084	1084	1092	1101	100
15°	931	948	971	1014	1049	261
25°	745	768	809	876	938	342
35°	536	567	624	712	796	335
45°	324	357	436	540	632	256
55°	214	221	252	370	469	192
65°	136	139	158	211	287	135
75°	72	76	86	92	106	77
85°	21	26	26	24	22	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1105.0	1105.0	1105.0	1105.0	1105.0
2.5°	1097.3	1105.0	1098.4	1098.4	1100.6
5°	1073.0	1084.0	1084.0	1091.7	1100.6
7.5°	1043.2	1055.3	1061.9	1079.6	1092.9
10°	1009.0	1022.2	1034.3	1060.8	1080.7
12.5°	972.5	986.9	1005.6	1039.9	1067.5
15°	930.6	948.2	971.4	1014.5	1048.7
17.5°	888.6	906.3	935.0	985.8	1024.4
20°	843.4	862.1	896.4	951.6	997.9
22.5°	794.8	815.8	852.2	915.1	969.2
25°	745.1	768.3	809.2	876.5	938.3
27.5°	693.2	720.8	765.0	836.7	905.2
30°	641.4	669.0	717.5	795.9	868.8
32.5°	589.5	619.3	672.3	755.1	833.4
35°	536.5	567.4	623.7	712.0	795.9
37.5°	484.6	515.5	578.4	670.1	755.1
40°	430.5	462.5	531.0	627.0	715.3
42.5°	375.3	409.5	483.5	582.9	674.5
45°	324.5	356.6	436.0	539.8	632.5
47.5°	287.0	308.0	388.6	495.6	591.7
50°	261.6	272.7	340.0	452.6	548.6
52.5°	236.2	245.1	294.7	408.4	507.8
55°	214.2	220.8	251.7	369.8	469.2
57.5°	192.1	198.7	218.6	331.2	423.9
60°	172.2	177.7	194.3	290.3	380.8
62.5°	153.4	157.9	175.5	251.7	334.5
65°	135.8	139.1	157.9	210.8	287.0
67.5°	118.1	121.4	140.2	172.2	236.2
70°	102.7	103.8	121.4	140.2	189.9
72.5°	87.2	88.3	102.7	113.7	145.7
75°	71.8	76.2	86.1	91.6	106.0
77.5°	58.5	64.0	69.5	71.8	71.8
80°	45.3	51.9	54.1	54.1	51.9
82.5°	33.1	38.6	39.7	37.5	35.3
85°	21.0	26.5	26.5	24.3	22.1
87.5°	9.9	14.4	14.4	13.2	9.9
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	13.66	15.15	14.02	15.47	15.78	17.59	19.08	17.95	19.40	19.71
	3H	15.23	16.57	15.61	16.90	17.26	19.01	20.35	19.38	20.68	21.04
	4H	15.84	17.10	16.24	17.45	17.83	19.42	20.68	19.82	21.03	21.41
	6H	16.34	17.50	16.75	17.87	18.26	19.64	20.80	20.05	21.17	21.56
	8H	16.51	17.62	16.94	18.01	18.41	19.70	20.80	20.12	21.19	21.60
	12H	16.63	17.69	17.06	18.08	18.50	19.73	20.79	20.16	21.17	21.60
4H	2H	14.39	15.65	14.79	16.00	16.38	17.71	18.97	18.11	19.32	19.70
	3H	16.17	17.22	16.58	17.62	18.02	19.32	20.37	19.73	20.77	21.17
	4H	16.91	17.85	17.34	18.27	18.71	19.85	20.79	20.28	21.20	21.64
	6H	17.55	18.36	18.00	18.81	19.27	20.19	21.01	20.65	21.45	21.91
	8H	17.77	18.54	18.24	18.98	19.45	20.29	21.05	20.75	21.50	21.97
	12H	17.95	18.63	18.43	19.11	19.58	20.36	21.05	20.85	21.52	22.00
8H	4H	17.31	18.07	17.77	18.52	18.99	19.95	20.72	20.42	21.16	21.63
	6H	18.10	18.73	18.59	19.22	19.70	20.39	21.03	20.89	21.52	21.99
	8H	18.42	18.99	18.93	19.50	19.99	20.55	21.12	21.07	21.63	22.12
	12H	18.69	19.20	19.20	19.69	20.25	20.69	21.19	21.20	21.68	22.25
12H	4H	17.35	18.04	17.84	18.51	18.99	19.95	20.64	20.44	21.12	21.59
	6H	18.18	18.75	18.69	19.26	19.75	20.41	20.98	20.92	21.49	21.98
	8H	18.57	19.08	19.08	19.57	20.13	20.62	21.12	21.13	21.61	22.18