

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: P1061503

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061503  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
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-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

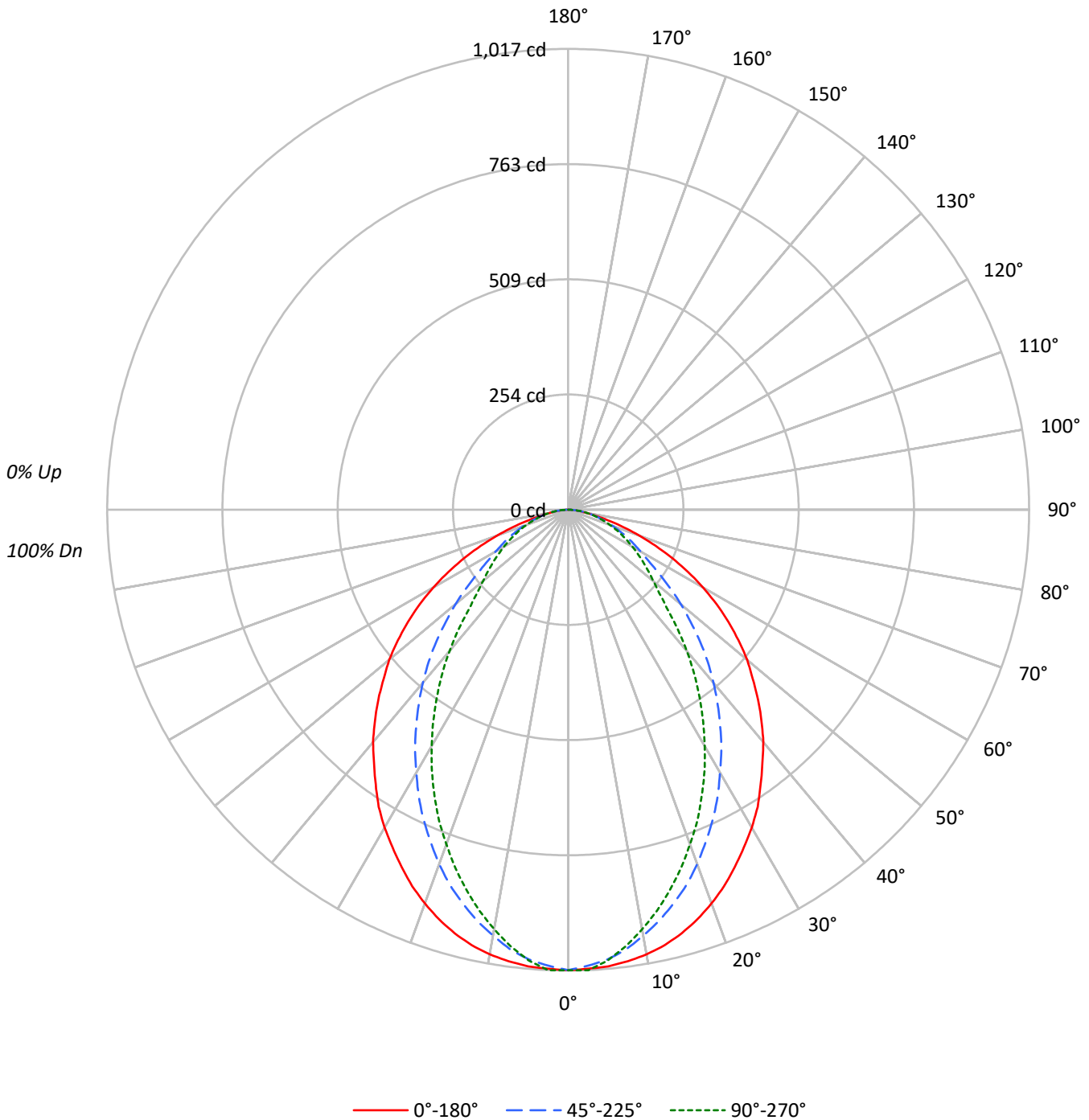
Lumens per Lamp: N/A  
Luminaire Lumens: 1925.1 lumens  
Efficiency: N/A  
Efficacy: 55.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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	108	104	100	97	100	97	94	96	93	91	92	90	89	87												87																
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75												75																
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65												65																
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57												57																
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50												50																
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45												45																
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40												40																
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36												36																
9	61	48	41	35	60	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°	6997	6997	6997
5°	6993	6886	6901
10°	6966	6673	6573
15°	6898	6410	6189
20°	6775	6095	5756
25°	6606	5733	5297
30°	6439	5324	4789
35°	6223	4915	4247
40°	6019	4482	3659
45°	5769	4008	2997
50°	5520	3475	2623
55°	5179	2900	2424
60°	4725	2538	2264
65°	4135	2318	2103
70°	3354	2088	1955
75°	2408	1907	1820
80°	1661	1705	1705
85°	1217	1485	1572

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5769 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.5	4.9
10°-20°	255.6	13.3
20°-30°	353.2	18.3
30°-40°	376.2	19.5
40°-50°	330.5	17.2
50°-60°	250.6	13.0
60°-70°	162.7	8.5
70°-80°	80.6	4.2
80°-90°	21.1	1.1
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°	703.3	36.5
0°-40°	1079.5	56.1
0°-60°	1660.6	86.3
0°-90°	1925.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1925.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	1012	1010	996	1000	998	96
15°	968	946	899	878	868	273
25°	870	822	755	716	697	401
35°	740	672	585	532	505	463
45°	592	510	412	338	308	457
55°	431	346	242	208	202	385
65°	254	189	142	131	129	251
75°	90	79	72	70	68	101
85°	15	18	19	19	20	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1016.2	1016.2	1016.2	1016.2	1016.2
2.5°	1014.0	1016.2	1007.4	1015.1	1017.3
5°	1011.8	1009.6	996.3	999.6	998.5
7.5°	1005.2	1000.8	978.7	976.5	972.1
10°	996.3	985.3	954.4	946.7	940.1
12.5°	984.2	966.5	929.0	913.6	905.9
15°	967.7	945.6	899.2	878.3	868.3
17.5°	947.8	916.9	868.3	839.7	828.6
20°	924.6	888.2	831.9	798.8	785.6
22.5°	899.2	856.2	793.3	758.0	743.7
25°	869.5	822.0	754.7	716.1	697.3
27.5°	839.7	786.7	713.9	670.8	651.0
30°	809.9	749.2	669.7	623.4	602.4
32.5°	777.9	710.6	628.9	578.2	553.9
35°	740.4	671.9	584.8	531.8	505.3
37.5°	703.9	631.1	541.8	482.2	456.8
40°	669.7	592.5	498.7	433.6	407.1
42.5°	631.1	551.7	455.7	387.3	357.5
45°	592.5	509.8	411.6	337.6	307.8
47.5°	551.7	470.0	365.2	292.4	272.5
50°	515.3	429.2	324.4	258.2	244.9
52.5°	473.3	389.5	282.5	231.7	222.9
55°	431.4	346.5	241.6	208.5	201.9
57.5°	388.4	307.8	209.6	188.7	182.1
60°	343.1	268.1	184.3	167.7	164.4
62.5°	297.9	227.3	162.2	150.1	145.6
65°	253.8	188.7	142.3	131.3	129.1
67.5°	208.5	153.4	122.5	114.7	113.6
70°	166.6	124.7	103.7	99.3	97.1
72.5°	128.0	99.3	87.2	83.9	82.8
75°	90.5	79.4	71.7	69.5	68.4
77.5°	60.7	60.7	57.4	55.2	56.3
80°	41.9	44.1	43.0	43.0	43.0
82.5°	27.6	29.8	30.9	30.9	30.9
85°	15.4	17.7	18.8	18.8	19.9
87.5°	5.5	6.6	7.7	8.8	8.8
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	17.31	18.80	17.68	19.12	19.43	13.55	15.05	13.92	15.36	15.67
	3H	18.62	19.96	19.00	20.29	20.65	15.14	16.47	15.51	16.80	17.16
	4H	18.99	20.25	19.39	20.59	20.97	15.74	16.99	16.14	17.34	17.72
	6H	19.17	20.32	19.58	20.69	21.08	16.21	17.37	16.62	17.73	18.13
	8H	19.21	20.31	19.63	20.70	21.10	16.37	17.47	16.80	17.86	18.26
	12H	19.22	20.27	19.65	20.65	21.08	16.48	17.54	16.91	17.92	18.35
4H	2H	17.42	18.68	17.82	19.03	19.40	14.22	15.47	14.62	15.82	16.20
	3H	18.91	19.95	19.32	20.35	20.75	16.00	17.03	16.41	17.43	17.84
	4H	19.39	20.32	19.82	20.74	21.18	16.71	17.65	17.15	18.06	18.50
	6H	19.67	20.48	20.13	20.93	21.39	17.30	18.11	17.76	18.56	19.02
	8H	19.74	20.50	20.21	20.94	21.41	17.51	18.27	17.97	18.71	19.18
	12H	19.78	20.46	20.26	20.94	21.41	17.66	18.34	18.15	18.82	19.29
8H	4H	19.47	20.23	19.93	20.67	21.14	17.03	17.78	17.49	18.23	18.70
	6H	19.83	20.46	20.33	20.95	21.43	17.73	18.36	18.23	18.85	19.33
	8H	19.95	20.51	20.46	21.02	21.51	18.01	18.57	18.53	19.08	19.57
	12H	20.04	20.53	20.55	21.02	21.59	18.24	18.74	18.75	19.23	19.80
12H	4H	19.46	20.14	19.95	20.62	21.09	17.05	17.73	17.53	18.21	18.68
	6H	19.84	20.40	20.35	20.91	21.40	17.78	18.34	18.30	18.86	19.34
	8H	20.00	20.49	20.51	20.98	21.55	18.12	18.62	18.63	19.11	19.67