

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: P1061494

Luminaire Tested: S125RDRP-S1090D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061494  
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-S1090D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

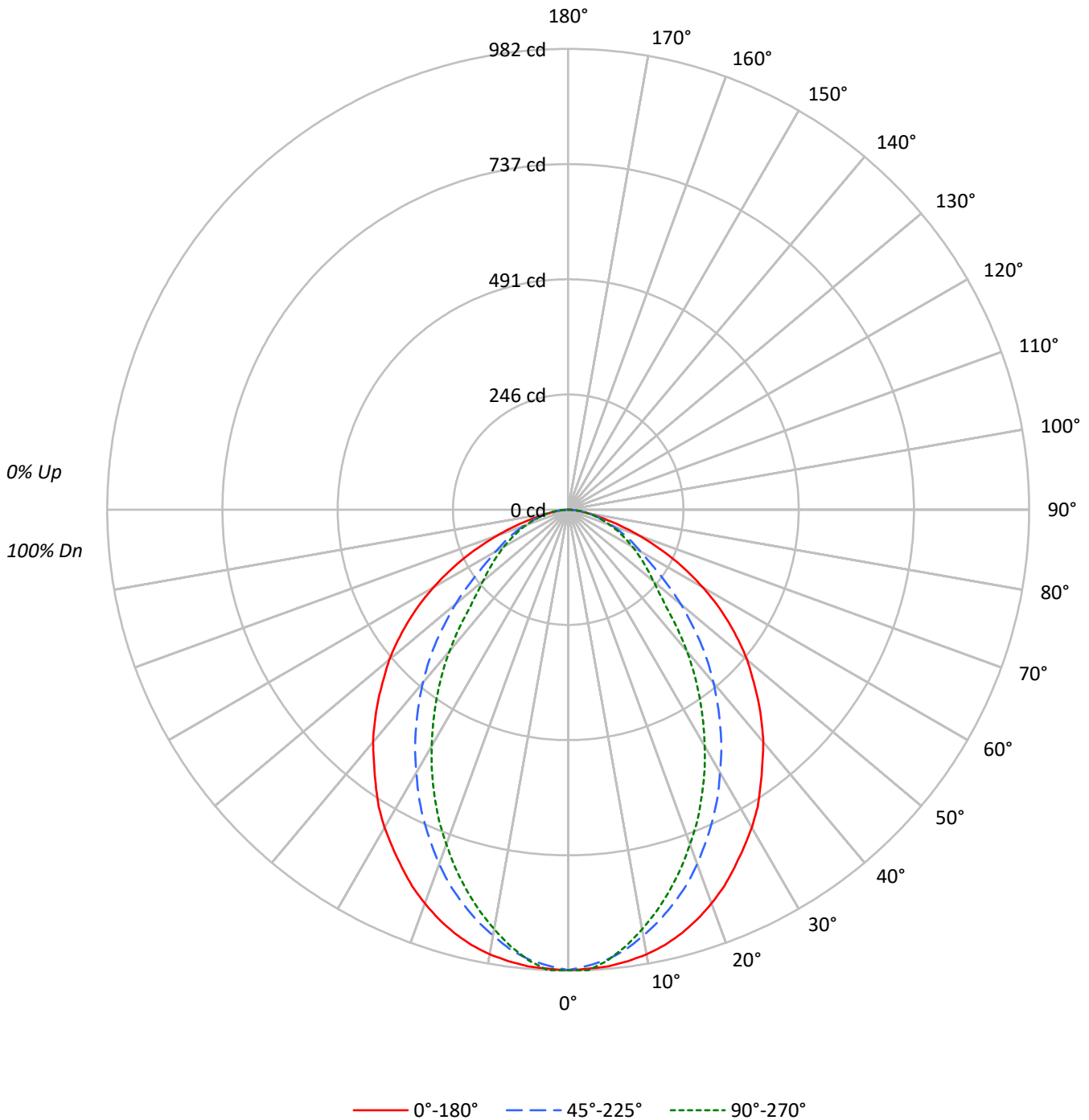
Lumens per Lamp: N/A  
Luminaire Lumens: 1858.7 lumens  
Efficiency: N/A  
Efficacy: 53.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	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°	6756	6756	6756
5°	6752	6649	6664
10°	6726	6443	6346
15°	6660	6189	5976
20°	6542	5886	5558
25°	6378	5536	5115
30°	6217	5142	4625
35°	6009	4746	4101
40°	5813	4328	3533
45°	5571	3870	2894
50°	5329	3355	2533
55°	5001	2801	2341
60°	4562	2450	2185
65°	3992	2239	2030
70°	3239	2015	1888
75°	2325	1841	1758
80°	1606	1645	1645
85°	1177	1430	1517

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5571 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.2	4.9
10°-20°	246.8	13.3
20°-30°	341.1	18.3
30°-40°	363.3	19.5
40°-50°	319.1	17.2
50°-60°	242.0	13.0
60°-70°	157.1	8.5
70°-80°	77.9	4.2
80°-90°	20.4	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°	679.0	36.5
0°-40°	1042.3	56.1
0°-60°	1603.4	86.3
0°-90°	1858.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1858.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	977	975	962	965	964	93
15°	934	913	868	848	838	263
25°	840	794	729	691	673	387
35°	715	649	565	514	488	447
45°	572	492	397	326	297	441
55°	417	334	233	201	195	372
65°	245	182	137	127	125	242
75°	87	77	69	67	66	97
85°	15	17	18	18	19	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	981.2	981.2	981.2	981.2	981.2
2.5°	979.1	981.2	972.7	980.1	982.3
5°	976.9	974.8	962.0	965.2	964.2
7.5°	970.5	966.3	945.0	942.8	938.6
10°	962.0	951.4	921.5	914.1	907.7
12.5°	950.3	933.3	897.0	882.1	874.7
15°	934.3	913.0	868.3	848.0	838.4
17.5°	915.1	885.3	838.4	810.7	800.1
20°	892.8	857.6	803.3	771.3	758.5
22.5°	868.3	826.7	766.0	731.9	718.1
25°	839.5	793.7	728.7	691.4	673.3
27.5°	810.7	759.6	689.3	647.7	628.6
30°	782.0	723.4	646.7	601.9	581.7
32.5°	751.1	686.1	607.3	558.3	534.8
35°	714.9	648.8	564.6	513.5	487.9
37.5°	679.7	609.4	523.1	465.6	441.1
40°	646.7	572.1	481.5	418.7	393.1
42.5°	609.4	532.7	440.0	373.9	345.2
45°	572.1	492.2	397.4	326.0	297.2
47.5°	532.7	453.8	352.6	282.3	263.1
50°	497.5	414.4	313.2	249.3	236.5
52.5°	457.0	376.1	272.7	223.7	215.2
55°	416.6	334.5	233.3	201.4	195.0
57.5°	375.0	297.2	202.4	182.2	175.8
60°	331.3	258.9	177.9	161.9	158.7
62.5°	287.6	219.5	156.6	144.9	140.6
65°	245.0	182.2	137.4	126.8	124.6
67.5°	201.4	148.1	118.3	110.8	109.7
70°	160.9	120.4	100.1	95.9	93.8
72.5°	123.6	95.9	84.2	81.0	79.9
75°	87.4	76.7	69.2	67.1	66.1
77.5°	58.6	58.6	55.4	53.3	54.3
80°	40.5	42.6	41.5	41.5	41.5
82.5°	26.6	28.8	29.8	29.8	29.8
85°	14.9	17.0	18.1	18.1	19.2
87.5°	5.3	6.4	7.5	8.5	8.5
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	17.19	18.68	17.55	18.99	19.31	13.43	14.92	13.80	15.24	15.55
	3H	18.50	19.84	18.88	20.17	20.53	15.02	16.35	15.39	16.68	17.04
	4H	18.87	20.12	19.27	20.47	20.85	15.62	16.87	16.02	17.22	17.60
	6H	19.05	20.20	19.46	20.57	20.96	16.09	17.25	16.50	17.61	18.01
	8H	19.08	20.18	19.51	20.57	20.98	16.25	17.35	16.68	17.74	18.14
	12H	19.10	20.15	19.53	20.53	20.96	16.36	17.41	16.79	17.80	18.23
4H	2H	17.30	18.55	17.70	18.90	19.28	14.09	15.35	14.49	15.70	16.07
	3H	18.79	19.83	19.20	20.23	20.63	15.88	16.91	16.29	17.31	17.72
	4H	19.27	20.20	19.70	20.61	21.05	16.59	17.53	17.03	17.94	18.38
	6H	19.55	20.36	20.01	20.80	21.27	17.18	17.99	17.64	18.44	18.90
	8H	19.62	20.38	20.08	20.82	21.29	17.39	18.14	17.85	18.59	19.06
	12H	19.66	20.34	20.14	20.81	21.29	17.54	18.22	18.02	18.70	19.17
8H	4H	19.35	20.11	19.81	20.55	21.02	16.90	17.66	17.37	18.11	18.57
	6H	19.71	20.34	20.21	20.83	21.31	17.61	18.23	18.11	18.73	19.20
	8H	19.83	20.39	20.34	20.90	21.39	17.89	18.45	18.40	18.96	19.45
	12H	19.91	20.41	20.42	20.90	21.47	18.12	18.61	18.63	19.11	19.67
12H	4H	19.34	20.02	19.82	20.50	20.97	16.93	17.61	17.41	18.08	18.56
	6H	19.71	20.28	20.23	20.79	21.27	17.66	18.22	18.18	18.73	19.22
	8H	19.87	20.37	20.38	20.86	21.43	18.00	18.49	18.51	18.98	19.55