

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061898

Luminaire Tested: S125RDR-H1090D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061898  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1090D935-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

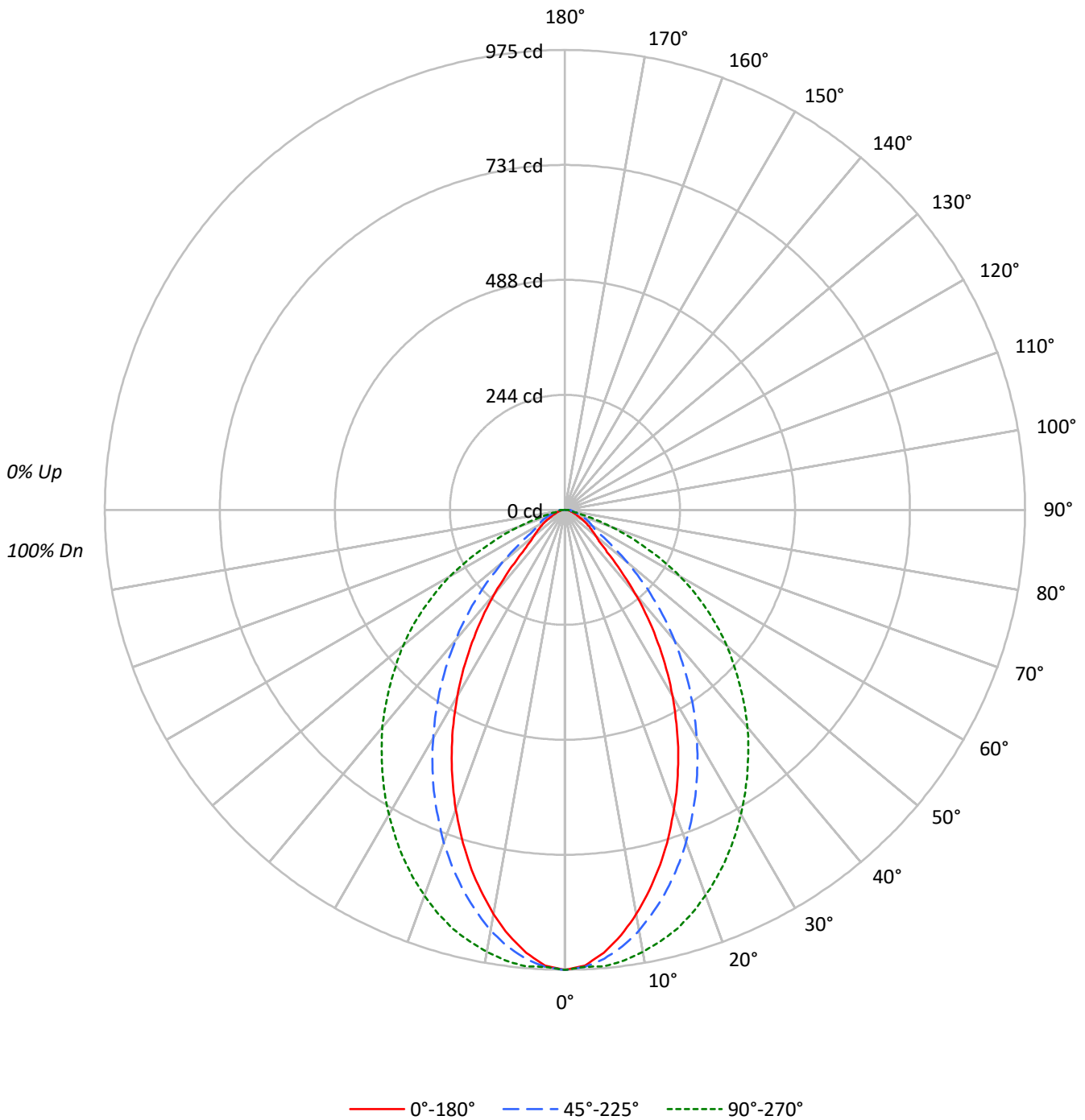
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1412.4 lumens  
Efficiency: N/A  
Efficacy: 45.3 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
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 (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

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

	0°	45°	90°
0°	6714	6714	6714
5°	6518	6603	6711
10°	6085	6332	6651
15°	5555	5946	6551
20°	4950	5497	6378
25°	4314	4991	6172
30°	3625	4440	5932
35°	2883	3859	5670
40°	2077	3241	5412
45°	1231	2573	5095
50°	910	1832	4796
55°	771	1132	4391
60°	628	913	3867
65°	490	844	3056
70°	417	731	2045
75°	386	633	827
80°	412	658	575
85°	490	980	656

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5095 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.9	6.4
10°-20°	236.0	16.7
20°-30°	308.5	21.8
30°-40°	300.5	21.3
40°-50°	225.4	16.0
50°-60°	141.3	10.0
60°-70°	73.6	5.2
70°-80°	26.6	1.9
80°-90°	10.5	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°	634.4	44.9
0°-40°	935.0	66.2
0°-60°	1301.7	92.2
0°-90°	1412.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1412.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	975	975	975	975	975	
5°	943	955	955	963	971	88
15°	779	802	834	886	919	217
25°	568	599	657	746	812	259
35°	343	379	459	581	675	213
45°	126	164	264	408	523	106
55°	64	67	94	247	366	57
65°	30	32	52	100	188	31
75°	14	20	24	25	31	16
85°	6	10	12	11	8	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	975.1	975.1	975.1	975.1	975.1
2.5°	966.8	976.1	969.9	969.9	969.9
5°	943.0	955.4	955.4	962.7	971.0
7.5°	909.8	924.3	933.7	951.3	963.7
10°	870.4	888.1	905.7	934.7	951.3
12.5°	825.9	846.6	871.5	911.9	936.8
15°	779.3	802.1	834.2	886.0	919.1
17.5°	728.5	755.4	793.8	855.9	896.4
20°	675.6	702.6	750.2	820.7	870.4
22.5°	622.8	651.8	703.6	783.4	842.5
25°	567.9	598.9	657.0	746.1	812.4
27.5°	511.9	544.0	608.3	707.8	779.3
30°	455.9	489.1	558.5	666.3	746.1
32.5°	400.0	435.2	508.8	623.8	710.9
35°	343.0	379.3	459.1	581.3	674.6
37.5°	288.1	324.3	409.3	537.8	638.3
40°	231.1	270.5	360.6	494.3	602.1
42.5°	175.1	215.5	311.9	450.8	562.7
45°	126.4	163.7	264.2	408.3	523.3
47.5°	97.4	118.1	215.5	364.8	485.0
50°	85.0	91.2	171.0	324.3	447.7
52.5°	73.6	77.7	128.5	287.0	407.2
55°	64.2	67.4	94.3	246.6	365.8
57.5°	53.9	58.0	74.6	207.2	323.3
60°	45.6	47.7	66.3	171.0	280.8
62.5°	37.3	39.4	59.1	134.7	233.2
65°	30.1	32.1	51.8	99.5	187.6
67.5°	24.9	25.9	43.5	70.5	144.0
70°	20.7	21.8	36.3	48.7	101.6
72.5°	17.6	20.7	29.0	35.2	64.2
75°	14.5	19.7	23.8	24.9	31.1
77.5°	12.4	18.7	19.7	19.7	17.6
80°	10.4	15.5	16.6	15.5	14.5
82.5°	8.3	12.4	13.5	13.5	11.4
85°	6.2	10.4	12.4	11.4	8.3
87.5°	4.1	9.3	10.4	9.3	6.2
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	6.53	7.88	6.90	8.20	8.51	16.14	17.50	16.51	17.81	18.12
	3H	7.39	8.59	7.77	8.92	9.28	16.99	18.19	17.37	18.52	18.88
	4H	7.81	8.93	8.22	9.28	9.67	17.06	18.18	17.46	18.53	18.91
	6H	8.24	9.27	8.66	9.64	10.03	17.04	18.07	17.46	18.44	18.84
	8H	8.42	9.40	8.85	9.79	10.19	17.03	18.01	17.46	18.40	18.80
	12H	8.58	9.52	9.02	9.90	10.33	17.02	17.95	17.45	18.33	18.76
4H	2H	7.49	8.61	7.90	8.96	9.35	16.01	17.13	16.41	17.48	17.86
	3H	8.55	9.47	8.96	9.87	10.27	16.92	17.84	17.33	18.24	18.64
	4H	9.11	9.93	9.55	10.35	10.79	17.02	17.84	17.46	18.26	18.70
	6H	9.71	10.42	10.17	10.86	11.33	17.05	17.76	17.51	18.20	18.67
	8H	9.95	10.61	10.42	11.06	11.53	17.05	17.71	17.52	18.16	18.63
	12H	10.17	10.76	10.66	11.24	11.72	17.06	17.65	17.55	18.13	18.60
8H	4H	9.58	10.24	10.05	10.69	11.16	16.95	17.61	17.41	18.05	18.52
	6H	10.40	10.94	10.90	11.43	11.91	17.00	17.54	17.50	18.04	18.52
	8H	10.77	11.26	11.30	11.77	12.27	17.03	17.52	17.55	18.03	18.53
	12H	11.17	11.60	11.68	12.09	12.66	17.10	17.53	17.61	18.02	18.59
12H	4H	9.63	10.22	10.12	10.70	11.18	16.91	17.50	17.40	17.98	18.45
	6H	10.52	11.00	11.04	11.52	12.01	16.97	17.45	17.49	17.97	18.46
	8H	11.01	11.44	11.52	11.93	12.50	17.04	17.47	17.55	17.96	18.53