

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: P1061980

Luminaire Tested: S125RDR-H1270D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061980  
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: S125RDR-H1270D935-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

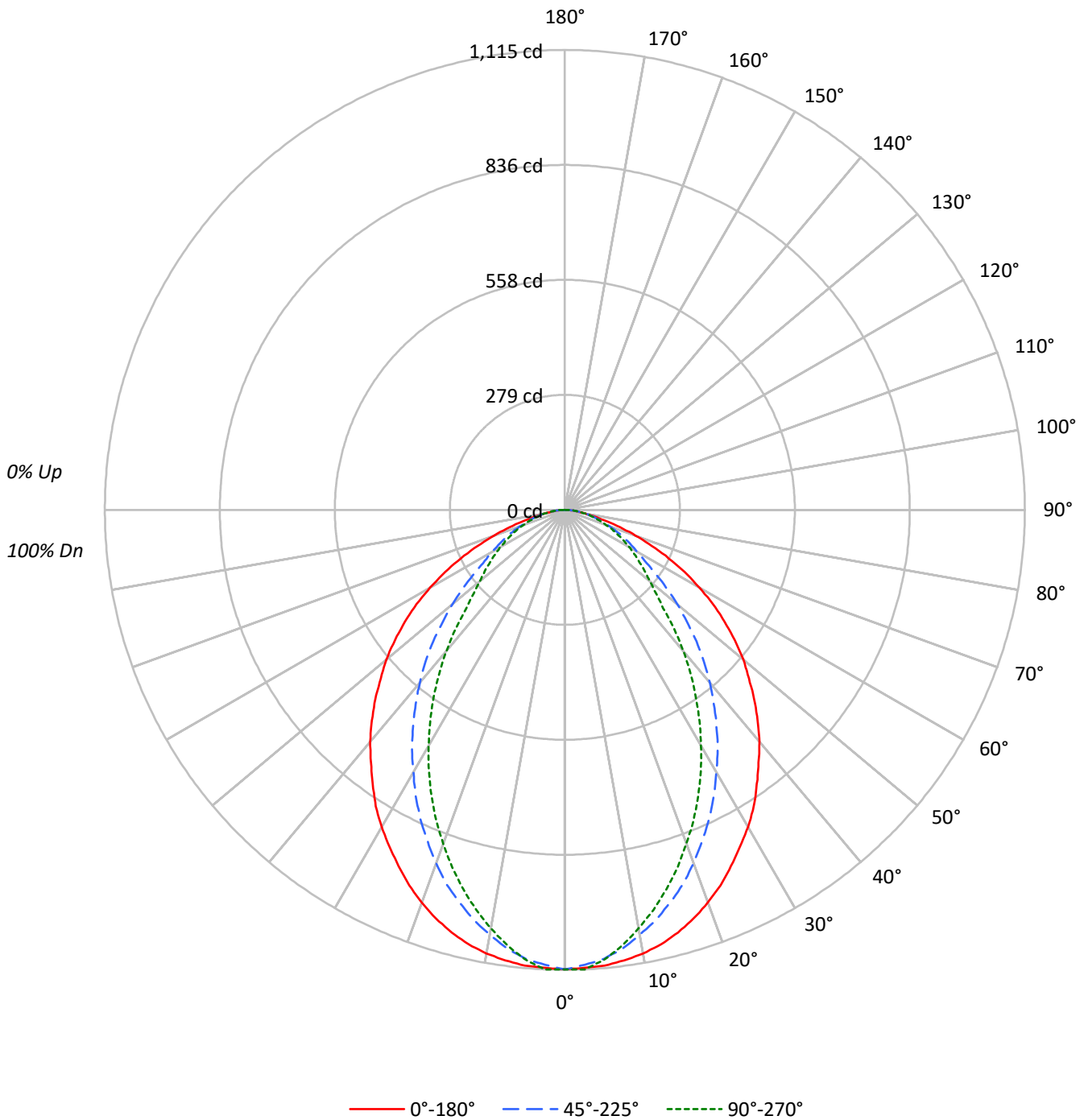
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2110.2 lumens  
Efficiency: N/A  
Efficacy: 57.8 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): 36.5  
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	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	75	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°	7669	7669	7669
5°	7666	7548	7565
10°	7635	7314	7205
15°	7561	7026	6785
20°	7426	6682	6309
25°	7241	6285	5807
30°	7058	5836	5250
35°	6822	5388	4656
40°	6598	4914	4011
45°	6324	4392	3285
50°	6050	3809	2876
55°	5677	3180	2656
60°	5179	2782	2481
65°	4532	2542	2305
70°	3676	2289	2142
75°	2639	2091	1995
80°	1824	1872	1872
85°	1335	1627	1722

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6324 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	4.9
10°-20°	280.1	13.3
20°-30°	387.2	18.3
30°-40°	412.4	19.5
40°-50°	362.3	17.2
50°-60°	274.7	13.0
60°-70°	178.4	8.5
70°-80°	88.4	4.2
80°-90°	23.2	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°	770.9	36.5
0°-40°	1183.3	56.1
0°-60°	1820.3	86.3
0°-90°	2110.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2110.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1114	1114	1114	1114	1114	
5°	1109	1107	1092	1096	1095	105
15°	1061	1036	986	963	952	299
25°	953	901	827	785	764	439
35°	812	737	641	583	554	508
45°	650	559	451	370	337	501
55°	473	380	265	229	221	422
65°	278	207	156	144	142	275
75°	99	87	79	76	75	111
85°	17	19	21	21	22	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1113.9	1113.9	1113.9	1113.9	1113.9
2.5°	1111.5	1113.9	1104.2	1112.7	1115.1
5°	1109.1	1106.7	1092.1	1095.8	1094.6
7.5°	1101.8	1097.0	1072.8	1070.4	1065.5
10°	1092.1	1080.1	1046.2	1037.7	1030.5
12.5°	1078.8	1059.5	1018.4	1001.4	993.0
15°	1060.7	1036.5	985.7	962.7	951.8
17.5°	1038.9	1005.1	951.8	920.4	908.3
20°	1013.5	973.6	911.9	875.7	861.1
22.5°	985.7	938.5	869.6	830.9	815.2
25°	953.1	901.1	827.3	784.9	764.4
27.5°	920.4	862.3	782.5	735.4	713.6
30°	887.7	821.2	734.1	683.3	660.4
32.5°	852.7	778.9	689.4	633.8	607.2
35°	811.6	736.6	641.0	583.0	553.9
37.5°	771.6	691.8	593.8	528.5	500.7
40°	734.1	649.5	546.7	475.3	446.3
42.5°	691.8	604.7	499.5	424.5	391.9
45°	649.5	558.8	451.1	370.1	337.4
47.5°	604.7	515.2	400.3	320.5	298.7
50°	564.8	470.5	355.6	283.0	268.5
52.5°	518.9	426.9	309.6	254.0	244.3
55°	472.9	379.8	264.9	228.6	221.3
57.5°	425.7	337.4	229.8	206.8	199.6
60°	376.1	293.9	202.0	183.8	180.2
62.5°	326.6	249.1	177.8	164.5	159.6
65°	278.2	206.8	156.0	143.9	141.5
67.5°	228.6	168.1	134.3	125.8	124.6
70°	182.6	136.7	113.7	108.9	106.4
72.5°	140.3	108.9	95.5	91.9	90.7
75°	99.2	87.1	78.6	76.2	75.0
77.5°	66.5	66.5	62.9	60.5	61.7
80°	46.0	48.4	47.2	47.2	47.2
82.5°	30.2	32.7	33.9	33.9	33.9
85°	16.9	19.4	20.6	20.6	21.8
87.5°	6.0	7.3	8.5	9.7	9.7
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	17.63	19.12	18.00	19.44	19.75	13.87	15.36	14.24	15.68	15.99
	3H	18.94	20.28	19.32	20.61	20.97	15.46	16.79	15.83	17.12	17.48
	4H	19.31	20.56	19.71	20.91	21.29	16.06	17.31	16.46	17.66	18.04
	6H	19.49	20.64	19.90	21.01	21.40	16.53	17.69	16.94	18.05	18.45
	8H	19.52	20.62	19.95	21.01	21.42	16.69	17.79	17.12	18.18	18.58
	12H	19.54	20.59	19.97	20.97	21.40	16.80	17.86	17.23	18.24	18.67
4H	2H	17.74	19.00	18.14	19.34	19.72	14.53	15.79	14.93	16.14	16.51
	3H	19.23	20.27	19.64	20.67	21.07	16.32	17.35	16.73	17.75	18.16
	4H	19.71	20.64	20.14	21.06	21.49	17.03	17.97	17.47	18.38	18.82
	6H	19.99	20.80	20.45	21.25	21.71	17.62	18.43	18.08	18.88	19.34
	8H	20.06	20.82	20.52	21.26	21.73	17.83	18.59	18.29	19.03	19.50
	12H	20.10	20.78	20.58	21.26	21.73	17.98	18.66	18.47	19.14	19.61
8H	4H	19.79	20.55	20.25	20.99	21.46	17.34	18.10	17.81	18.55	19.01
	6H	20.15	20.78	20.65	21.27	21.75	18.05	18.68	18.55	19.17	19.65
	8H	20.27	20.83	20.78	21.34	21.83	18.33	18.89	18.85	19.40	19.89
	12H	20.36	20.85	20.87	21.34	21.91	18.56	19.06	19.07	19.55	20.12
12H	4H	19.78	20.46	20.27	20.94	21.41	17.37	18.05	17.85	18.53	19.00
	6H	20.16	20.72	20.67	21.23	21.72	18.10	18.66	18.62	19.18	19.66
	8H	20.32	20.81	20.83	21.30	21.87	18.44	18.94	18.95	19.43	19.99