

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: P1061971

Luminaire Tested: S125RDR-H1270D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061971  
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-H1270D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

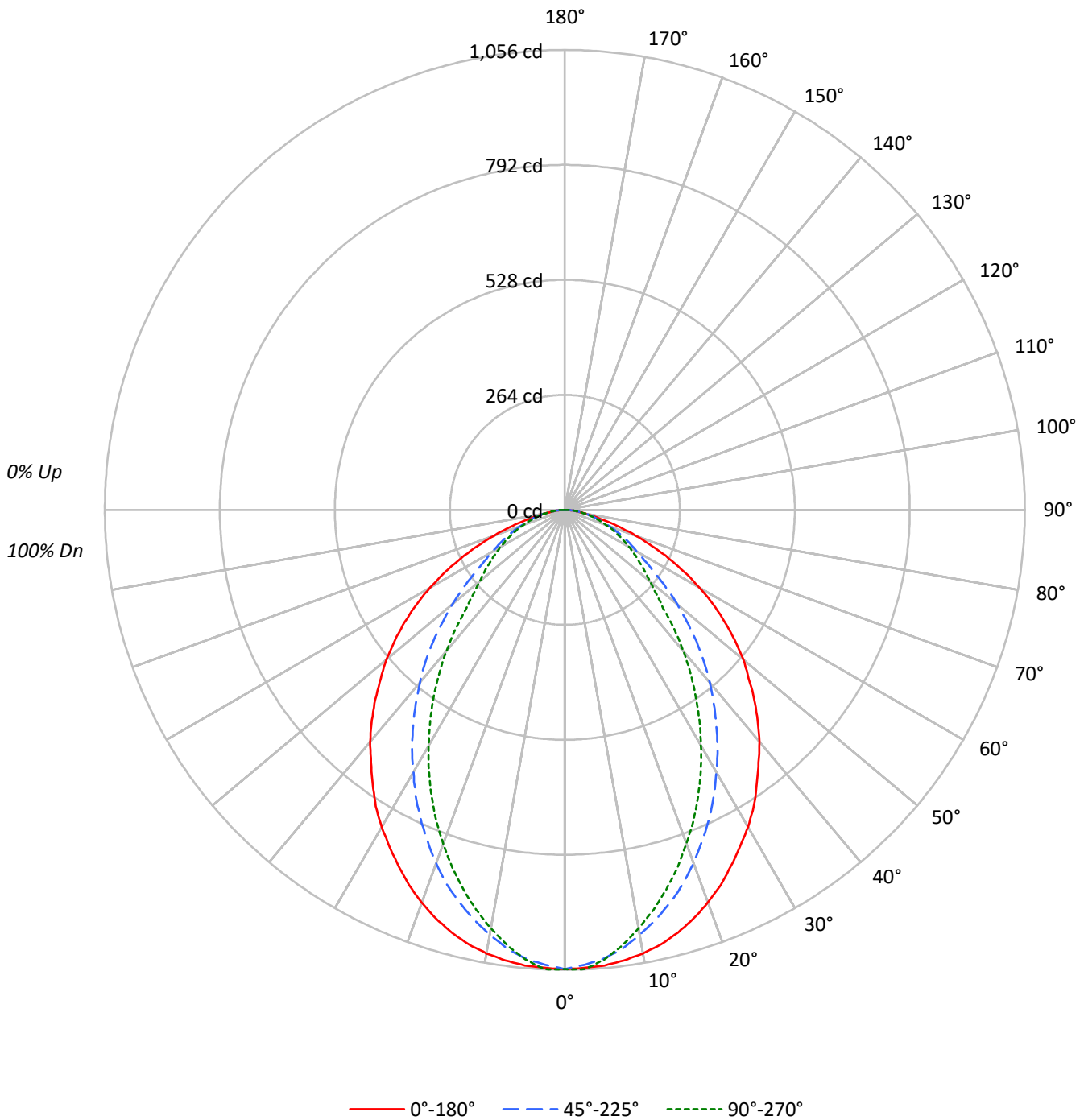
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1998.2 lumens  
Efficiency: N/A  
Efficacy: 54.7 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	100	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65	
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57	57	57	57	
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50	50	50	50	
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45	45	45	45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	40	40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	36	36	
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33	33	33	33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30	30	30	30	

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

	0°	45°	90°
0°	7263	7263	7263
5°	7258	7148	7164
10°	7231	6926	6822
15°	7159	6653	6425
20°	7032	6327	5975
25°	6856	5952	5499
30°	6683	5527	4971
35°	6459	5102	4409
40°	6248	4653	3798
45°	5988	4160	3111
50°	5729	3607	2723
55°	5375	3011	2516
60°	4905	2634	2349
65°	4291	2406	2183
70°	3481	2168	2029
75°	2498	1979	1889
80°	1725	1772	1772
85°	1264	1540	1627

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5988 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.1	4.9
10°-20°	265.3	13.3
20°-30°	366.6	18.3
30°-40°	390.5	19.5
40°-50°	343.1	17.2
50°-60°	260.1	13.0
60°-70°	168.9	8.5
70°-80°	83.7	4.2
80°-90°	21.9	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°	730.0	36.5
0°-40°	1120.5	56.1
0°-60°	1723.7	86.3
0°-90°	1998.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1998.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1055	1055	1055	1055	1055	
5°	1050	1048	1034	1038	1036	100
15°	1004	982	933	912	901	283
25°	902	853	783	743	724	416
35°	768	698	607	552	524	481
45°	615	529	427	350	320	474
55°	448	360	251	216	210	399
65°	263	196	148	136	134	260
75°	94	82	74	72	71	105
85°	16	18	20	20	21	20
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1054.8	1054.8	1054.8	1054.8	1054.8
2.5°	1052.5	1054.8	1045.6	1053.6	1055.9
5°	1050.2	1047.9	1034.2	1037.6	1036.5
7.5°	1043.3	1038.8	1015.9	1013.6	1009.0
10°	1034.2	1022.7	990.7	982.6	975.8
12.5°	1021.6	1003.3	964.3	948.3	940.3
15°	1004.4	981.5	933.4	911.6	901.3
17.5°	983.8	951.7	901.3	871.5	860.1
20°	959.7	921.9	863.5	829.2	815.4
22.5°	933.4	888.7	823.4	786.8	771.9
25°	902.5	853.2	783.4	743.3	723.8
27.5°	871.5	816.6	741.0	696.3	675.7
30°	840.6	777.6	695.2	647.1	625.3
32.5°	807.4	737.6	652.8	600.1	574.9
35°	768.5	697.5	607.0	552.0	524.5
37.5°	730.7	655.1	562.3	500.5	474.1
40°	695.2	615.0	517.7	450.1	422.6
42.5°	655.1	572.6	473.0	402.0	371.1
45°	615.0	529.1	427.2	350.5	319.5
47.5°	572.6	487.9	379.1	303.5	282.9
50°	534.8	445.5	336.7	268.0	254.2
52.5°	491.3	404.3	293.2	240.5	231.3
55°	447.8	359.6	250.8	216.5	209.6
57.5°	403.1	319.5	217.6	195.8	189.0
60°	356.2	278.3	191.3	174.1	170.6
62.5°	309.2	235.9	168.4	155.8	151.2
65°	263.4	195.8	147.7	136.3	134.0
67.5°	216.5	159.2	127.1	119.1	118.0
70°	172.9	129.4	107.7	103.1	100.8
72.5°	132.9	103.1	90.5	87.0	85.9
75°	93.9	82.5	74.4	72.2	71.0
77.5°	63.0	63.0	59.6	57.3	58.4
80°	43.5	45.8	44.7	44.7	44.7
82.5°	28.6	30.9	32.1	32.1	32.1
85°	16.0	18.3	19.5	19.5	20.6
87.5°	5.7	6.9	8.0	9.2	9.2
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	17.44	18.93	17.81	19.25	19.56	13.68	15.17	14.05	15.49	15.80
	3H	18.75	20.09	19.13	20.42	20.78	15.27	16.60	15.64	16.93	17.29
	4H	19.12	20.38	19.52	20.72	21.10	15.87	17.12	16.27	17.47	17.85
	6H	19.30	20.45	19.71	20.82	21.21	16.34	17.50	16.75	17.86	18.26
	8H	19.33	20.44	19.76	20.83	21.23	16.50	17.60	16.93	17.99	18.39
	12H	19.35	20.40	19.78	20.78	21.21	16.61	17.67	17.04	18.05	18.48
4H	2H	17.55	18.81	17.95	19.15	19.53	14.34	15.60	14.74	15.95	16.32
	3H	19.04	20.08	19.45	20.48	20.88	16.13	17.16	16.54	17.56	17.97
	4H	19.52	20.45	19.95	20.87	21.31	16.84	17.78	17.28	18.19	18.63
	6H	19.80	20.61	20.26	21.06	21.52	17.43	18.25	17.89	18.69	19.15
	8H	19.87	20.63	20.34	21.07	21.54	17.64	18.40	18.10	18.84	19.31
	12H	19.91	20.59	20.39	21.07	21.54	17.79	18.47	18.28	18.95	19.42
8H	4H	19.60	20.36	20.06	20.80	21.27	17.16	17.91	17.62	18.36	18.83
	6H	19.96	20.59	20.46	21.08	21.56	17.86	18.49	18.36	18.98	19.46
	8H	20.08	20.64	20.59	21.15	21.64	18.14	18.70	18.66	19.21	19.70
	12H	20.17	20.66	20.68	21.15	21.72	18.37	18.87	18.88	19.36	19.93
12H	4H	19.59	20.27	20.08	20.75	21.22	17.18	17.86	17.66	18.34	18.81
	6H	19.97	20.53	20.48	21.04	21.53	17.91	18.48	18.43	18.99	19.47
	8H	20.13	20.62	20.64	21.11	21.68	18.25	18.75	18.76	19.24	19.80