

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: P1061958

Luminaire Tested: S125RDR-H1270D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061958  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D927-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

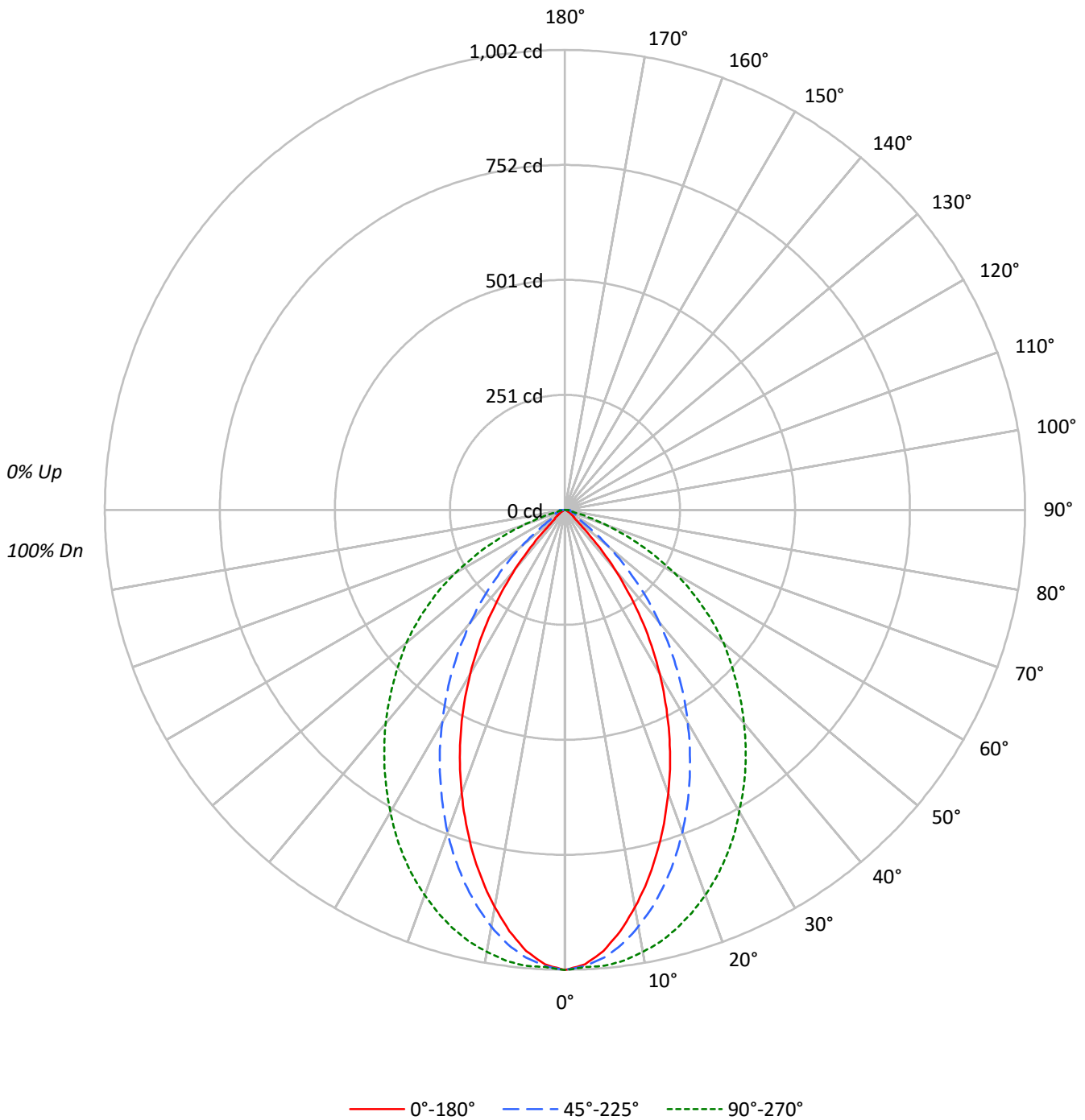
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1297.1 lumens  
Efficiency: N/A  
Efficacy: 35.5 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

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

	0°	45°	90°
0°	6902	6902	6902
5°	6668	6768	6891
10°	6145	6448	6838
15°	5519	6003	6725
20°	4815	5477	6546
25°	4079	4883	6321
30°	3277	4251	6040
35°	2425	3586	5758
40°	1502	2864	5457
45°	586	2093	5131
50°	274	1312	4832
55°	200	562	4386
60°	138	399	3805
65°	91	417	2959
70°	91	380	1862
75°	120	386	593
80°	178	440	397
85°	261	877	616

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5131 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.9	7.1
10°-20°	238.2	18.4
20°-30°	303.4	23.4
30°-40°	282.4	21.8
40°-50°	194.4	15.0
50°-60°	110.0	8.5
60°-70°	52.0	4.0
70°-80°	16.3	1.3
80°-90°	8.5	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°	633.5	48.8
0°-40°	915.9	70.6
0°-60°	1220.4	94.1
0°-90°	1297.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1297.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	965	978	979	988	997	89
15°	774	800	842	906	944	216
25°	537	571	643	751	832	245
35°	288	329	427	573	685	178
45°	60	96	215	389	527	57
55°	17	19	47	224	365	15
65°	6	7	26	80	182	6
75°	4	10	14	16	22	5
85°	3	9	11	10	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1002.5	1002.5	1002.5	1002.5	1002.5
2.5°	991.4	1001.4	994.7	995.9	997.0
5°	964.7	978.0	979.2	988.1	997.0
7.5°	925.7	942.4	954.6	975.8	990.3
10°	878.9	898.9	922.3	956.9	978.0
12.5°	828.8	852.2	884.5	933.5	963.6
15°	774.2	799.8	842.1	905.6	943.5
17.5°	716.3	745.2	796.5	872.2	920.1
20°	657.2	688.4	747.5	834.3	893.4
22.5°	598.2	630.5	696.2	793.1	864.4
25°	536.9	571.4	642.7	750.8	832.1
27.5°	474.5	510.2	589.3	707.3	797.6
30°	412.2	450.0	534.7	662.8	759.7
32.5°	350.9	388.8	481.2	618.2	722.9
35°	288.5	328.6	426.6	572.6	685.1
37.5°	226.1	269.6	373.2	525.8	646.1
40°	167.1	208.3	318.6	480.1	607.1
42.5°	111.4	151.5	269.6	434.4	567.0
45°	60.2	95.8	215.0	388.8	526.9
47.5°	32.3	51.2	168.2	344.2	487.9
50°	25.6	29.0	122.5	303.0	451.1
52.5°	21.2	23.4	80.2	264.0	408.8
55°	16.7	18.9	46.8	223.9	365.4
57.5°	13.4	15.6	30.1	186.0	323.0
60°	10.0	12.3	29.0	149.3	276.3
62.5°	7.8	8.9	26.7	114.7	227.2
65°	5.6	6.7	25.6	80.2	181.6
67.5°	4.5	5.6	23.4	51.2	135.9
70°	4.5	4.5	18.9	33.4	92.5
72.5°	4.5	7.8	16.7	22.3	55.7
75°	4.5	10.0	14.5	15.6	22.3
77.5°	4.5	11.1	12.3	12.3	12.3
80°	4.5	10.0	11.1	11.1	10.0
82.5°	4.5	8.9	10.0	11.1	8.9
85°	3.3	8.9	11.1	10.0	7.8
87.5°	3.3	8.9	10.0	8.9	5.6
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	0.00	0.00	0.00	0.00	0.00	15.96	17.25	16.32	17.56	17.87
	3H	0.00	0.00	0.00	0.00	0.00	16.68	17.82	17.06	18.15	18.51
	4H	0.00	0.11	0.00	0.46	0.84	16.70	17.76	17.10	18.11	18.50
	6H	0.31	1.29	0.73	1.66	2.05	16.65	17.63	17.07	18.00	18.39
	8H	0.96	1.88	1.39	2.27	2.68	16.63	17.55	17.06	17.94	18.35
	12H	1.54	2.42	1.97	2.81	3.24	16.61	17.49	17.04	17.88	18.31
4H	2H	0.47	1.53	0.87	1.88	2.26	15.75	16.81	16.15	17.16	17.55
	3H	1.28	2.15	1.70	2.55	2.96	16.50	17.37	16.92	17.78	18.18
	4H	2.29	3.06	2.72	3.48	3.93	16.53	17.31	16.97	17.73	18.17
	6H	3.57	4.24	4.03	4.68	5.15	16.51	17.18	16.98	17.63	18.09
	8H	4.15	4.78	4.62	5.22	5.70	16.50	17.12	16.97	17.57	18.04
	12H	4.71	5.26	5.20	5.75	6.22	16.50	17.05	16.99	17.54	18.01
8H	4H	3.71	4.33	4.18	4.78	5.25	16.42	17.04	16.89	17.49	17.96
	6H	5.26	5.77	5.77	6.27	6.75	16.41	16.91	16.91	17.41	17.89
	8H	6.06	6.51	6.58	7.03	7.52	16.42	16.87	16.94	17.39	17.88
	12H	6.89	7.30	7.41	7.79	8.37	16.48	16.88	16.99	17.38	17.95
12H	4H	3.93	4.47	4.41	4.96	5.43	16.37	16.92	16.86	17.41	17.88
	6H	5.63	6.09	6.16	6.60	7.10	16.36	16.82	16.88	17.33	17.82
	8H	6.62	7.03	7.14	7.52	8.09	16.41	16.81	16.92	17.30	17.88