

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: P1061938

Luminaire Tested: S125RDRP-H1270D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061938  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H1270D840-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

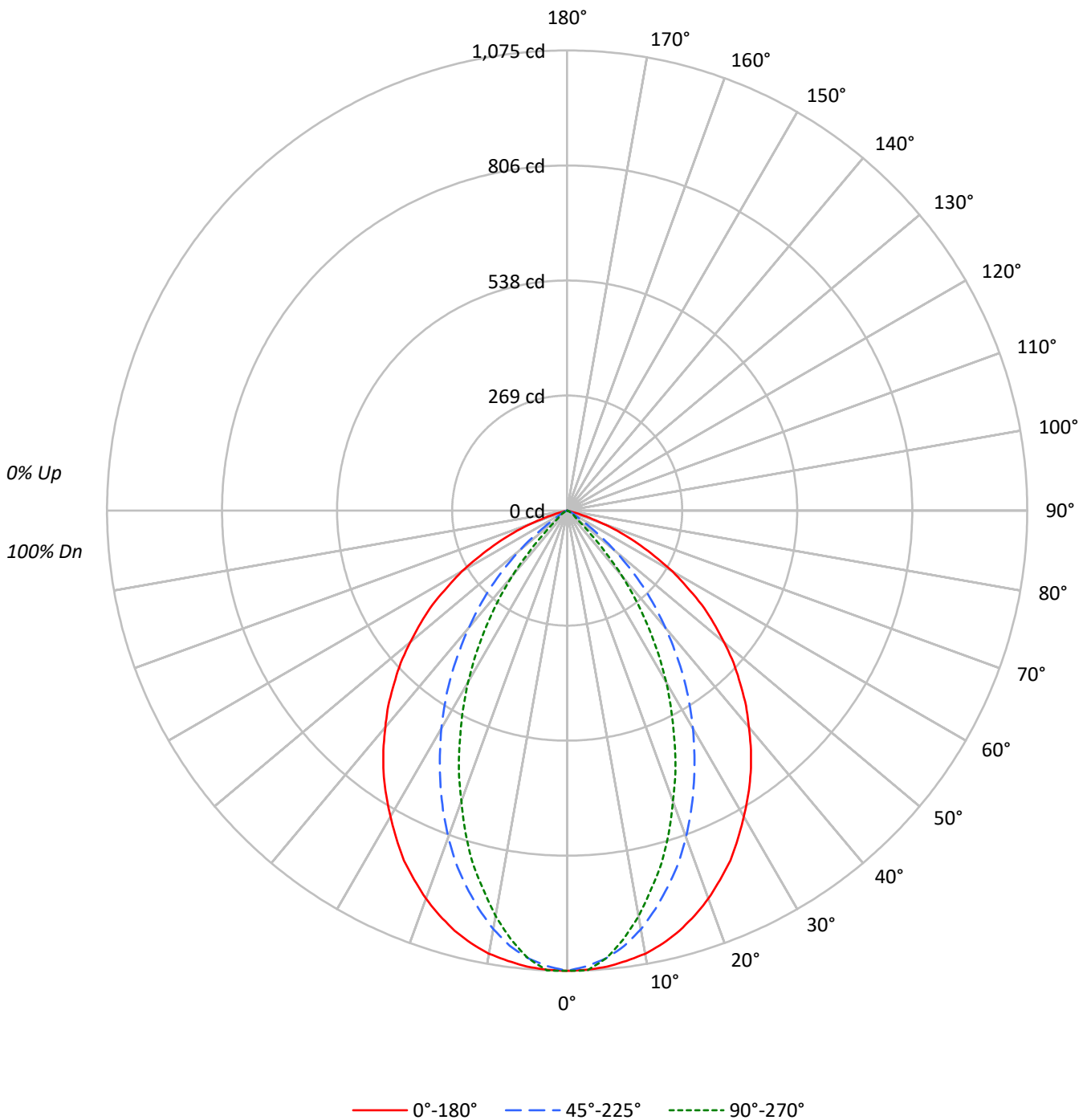
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1389.1 lumens  
Efficiency: N/A  
Efficacy: 38.1 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
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 (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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	7403	7403	7403
5°	7393	7255	7255
10°	7349	6943	6724
15°	7240	6482	6077
20°	7068	5945	5290
25°	6854	5324	4504
30°	6564	4669	3676
35°	6284	3982	2754
40°	5941	3213	1785
45°	5567	2431	773
50°	5120	1550	289
55°	4614	681	204
60°	3907	293	136
65°	2959	184	70
70°	1800	87	28
75°	378	37	37
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5567 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.1	7.1
10°-20°	258.4	18.6
20°-30°	331.8	23.9
30°-40°	312.3	22.5
40°-50°	218.4	15.7
50°-60°	116.6	8.4
60°-70°	46.5	3.3
70°-80°	6.0	0.4
80°-90°	0.0	0.0
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°	689.3	49.6
0°-40°	1001.6	72.1
0°-60°	1336.5	96.2
0°-90°	1389.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1389.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1070	1067	1050	1052	1050	101
15°	1016	983	909	867	852	286
25°	902	823	701	624	593	414
35°	748	628	474	366	328	466
45°	572	428	250	121	79	441
55°	384	236	57	20	17	341
65°	182	72	11	6	4	181
75°	14	4	1	1	1	28
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1075.2	1075.2	1075.2	1075.2	1075.2
2.5°	1073.8	1075.2	1065.3	1073.8	1075.2
5°	1069.6	1066.7	1049.7	1052.5	1049.7
7.5°	1061.1	1054.0	1025.6	1015.7	1010.0
10°	1051.1	1035.5	993.0	971.7	961.8
12.5°	1035.5	1012.8	953.3	920.6	906.4
15°	1015.7	983.0	909.3	866.7	852.5
17.5°	991.6	949.0	863.9	811.4	790.1
20°	964.6	907.9	811.4	749.0	722.0
22.5°	933.4	868.1	757.5	688.0	661.0
25°	902.2	822.7	700.8	624.2	592.9
27.5°	863.9	775.9	644.0	561.7	527.7
30°	825.6	729.1	587.3	497.9	462.4
32.5°	787.3	679.5	530.5	431.2	395.8
35°	747.6	628.4	473.8	366.0	327.7
37.5°	705.0	577.3	412.8	303.6	263.8
40°	661.0	527.7	357.5	242.6	198.6
42.5°	618.5	478.0	302.1	183.0	134.8
45°	571.7	428.4	249.7	120.6	79.4
47.5°	527.7	380.2	195.8	69.5	41.1
50°	478.0	330.5	144.7	36.9	27.0
52.5°	431.2	282.3	96.5	24.1	21.3
55°	384.4	235.5	56.7	19.9	17.0
57.5°	330.5	190.1	31.2	15.6	12.8
60°	283.7	148.9	21.3	11.3	9.9
62.5°	229.8	109.2	15.6	8.5	7.1
65°	181.6	72.3	11.3	5.7	4.3
67.5°	134.8	42.6	7.1	2.8	2.8
70°	89.4	22.7	4.3	1.4	1.4
72.5°	46.8	9.9	2.8	1.4	1.4
75°	14.2	4.3	1.4	1.4	1.4
77.5°	0.0	1.4	0.0	0.0	1.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	15.90	17.16	16.26	17.48	17.79	0.00	0.00	0.00	0.00	0.00
	3H	16.48	17.60	16.86	17.93	18.29	0.00	0.00	0.00	0.00	0.00
	4H	16.45	17.48	16.85	17.83	18.22	0.00	0.00	0.00	0.00	0.00
	6H	16.36	17.31	16.78	17.68	18.07	0.00	0.00	0.00	0.00	0.00
	8H	16.32	17.21	16.75	17.60	18.01	0.00	0.00	0.00	0.00	0.00
	12H	16.27	17.12	16.70	17.51	17.94	0.00	0.00	0.00	0.00	0.00
4H	2H	15.67	16.70	16.08	17.06	17.44	0.00	0.00	0.00	0.00	0.00
	3H	16.26	17.10	16.68	17.51	17.91	0.00	0.00	0.00	0.00	0.00
	4H	16.21	16.96	16.65	17.38	17.82	0.00	0.00	0.00	0.00	0.00
	6H	16.13	16.76	16.59	17.21	17.68	0.00	0.00	0.00	0.00	0.00
	8H	16.07	16.66	16.54	17.11	17.58	0.00	0.00	0.00	0.00	0.00
	12H	16.02	16.54	16.50	17.02	17.50	0.00	0.00	0.00	0.00	0.00
8H	4H	16.07	16.66	16.54	17.11	17.58	0.00	0.00	0.00	0.00	0.00
	6H	15.96	16.44	16.46	16.94	17.42	0.00	0.00	0.00	0.00	0.00
	8H	15.89	16.33	16.42	16.84	17.34	0.00	0.00	0.00	0.00	0.00
	12H	15.85	16.23	16.36	16.72	17.30	0.00	0.00	0.00	0.00	0.00
12H	4H	16.02	16.54	16.50	17.02	17.50	0.00	0.00	0.00	0.00	0.00
	6H	15.89	16.33	16.42	16.84	17.34	0.00	0.00	0.00	0.00	0.00
	8H	15.85	16.23	16.36	16.72	17.30	0.00	0.00	0.00	0.00	0.00