

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: P1061940

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061940  
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: S125RDRP-H1270D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

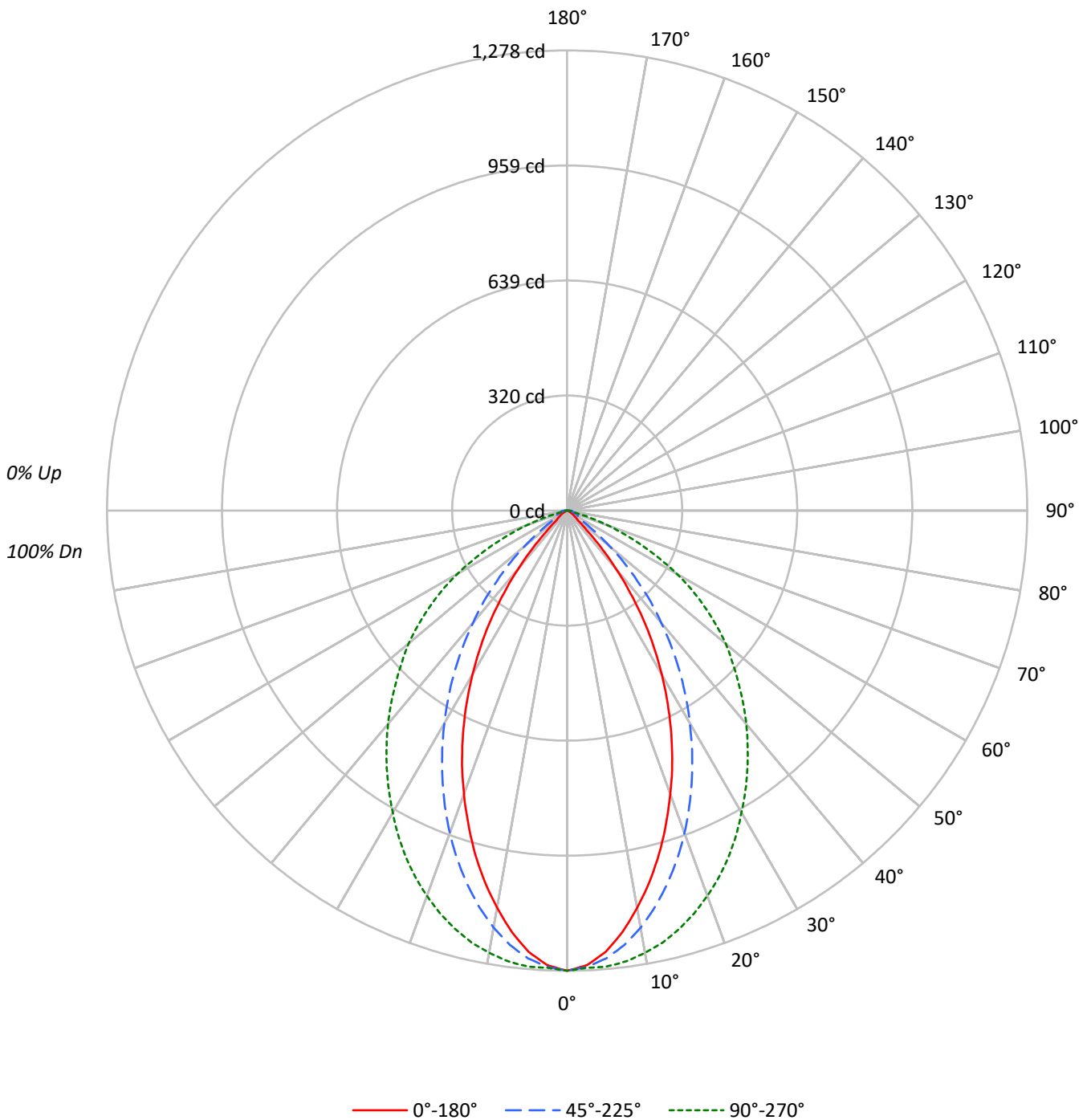
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1653.5 lumens  
Efficiency: N/A  
Efficacy: 45.3 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 (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	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°	8799	8799	8799
5°	8500	8627	8784
10°	7833	8221	8717
15°	7035	7652	8574
20°	6139	6981	8345
25°	5200	6225	8059
30°	4177	5419	7700
35°	3091	4572	7340
40°	1914	3650	6956
45°	747	2669	6540
50°	350	1673	6160
55°	256	715	5591
60°	176	508	4850
65°	116	533	3772
70°	115	485	2373
75°	152	492	756
80°	226	563	508
85°	340	1122	782

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6540 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.2	7.1
10°-20°	303.7	18.4
20°-30°	386.8	23.4
30°-40°	360.0	21.8
40°-50°	247.8	15.0
50°-60°	140.3	8.5
60°-70°	66.3	4.0
70°-80°	20.7	1.3
80°-90°	10.8	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°	807.6	48.8
0°-40°	1167.6	70.6
0°-60°	1555.7	94.1
0°-90°	1653.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1653.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1230	1247	1248	1260	1271	114
15°	987	1020	1074	1154	1203	275
25°	684	728	819	957	1061	312
35°	368	419	544	730	873	227
45°	77	122	274	496	672	72
55°	21	24	60	285	466	20
65°	7	8	33	102	232	8
75°	6	13	18	20	28	6
85°	4	11	14	13	10	5
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1278.0	1278.0	1278.0	1278.0	1278.0
2.5°	1263.8	1276.6	1268.1	1269.5	1270.9
5°	1229.8	1246.8	1248.2	1259.6	1270.9
7.5°	1180.1	1201.4	1217.0	1244.0	1262.4
10°	1120.4	1146.0	1175.8	1219.8	1246.8
12.5°	1056.5	1086.3	1127.5	1190.0	1228.3
15°	986.9	1019.6	1073.5	1154.5	1202.8
17.5°	913.1	950.0	1015.3	1111.9	1172.9
20°	837.8	877.6	952.8	1063.6	1138.9
22.5°	762.6	803.7	887.5	1011.1	1101.9
25°	684.5	728.5	819.4	957.1	1060.8
27.5°	604.9	650.4	751.2	901.7	1016.7
30°	525.4	573.7	681.6	844.9	968.5
32.5°	447.3	495.6	613.5	788.1	921.6
35°	367.8	418.9	543.9	729.9	873.3
37.5°	288.3	343.6	475.7	670.3	823.6
40°	213.0	265.5	406.1	612.0	773.9
42.5°	142.0	193.1	343.6	553.8	722.8
45°	76.7	122.1	274.1	495.6	671.7
47.5°	41.2	65.3	214.4	438.8	622.0
50°	32.7	36.9	156.2	386.2	575.1
52.5°	27.0	29.8	102.2	336.5	521.2
55°	21.3	24.1	59.6	285.4	465.8
57.5°	17.0	19.9	38.3	237.1	411.8
60°	12.8	15.6	36.9	190.3	352.2
62.5°	9.9	11.4	34.1	146.3	289.7
65°	7.1	8.5	32.7	102.2	231.5
67.5°	5.7	7.1	29.8	65.3	173.2
70°	5.7	5.7	24.1	42.6	117.9
72.5°	5.7	9.9	21.3	28.4	71.0
75°	5.7	12.8	18.5	19.9	28.4
77.5°	5.7	14.2	15.6	15.6	15.6
80°	5.7	12.8	14.2	14.2	12.8
82.5°	5.7	11.4	12.8	14.2	11.4
85°	4.3	11.4	14.2	12.8	9.9
87.5°	4.3	11.4	12.8	11.4	7.1
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	0.11	0.43	16.80	18.09	17.16	18.40	18.72
	3H	0.00	0.12	0.00	0.45	0.82	17.52	18.66	17.90	18.99	19.36
	4H	0.00	0.94	0.28	1.29	1.68	17.54	18.61	17.95	18.96	19.34
	6H	1.15	2.12	1.56	2.49	2.89	17.49	18.47	17.91	18.84	19.23
	8H	1.79	2.71	2.22	3.10	3.51	17.47	18.39	17.90	18.78	19.19
	12H	2.38	3.27	2.82	3.65	4.08	17.45	18.34	17.89	18.72	19.15
4H	2H	1.32	2.38	1.72	2.73	3.11	16.59	17.65	16.99	18.00	18.39
	3H	2.13	2.99	2.54	3.40	3.80	17.35	18.21	17.76	18.62	19.02
	4H	3.14	3.91	3.57	4.33	4.78	17.38	18.15	17.81	18.57	19.01
	6H	4.42	5.08	4.88	5.53	6.00	17.35	18.02	17.82	18.47	18.94
	8H	5.00	5.62	5.47	6.07	6.54	17.34	17.96	17.81	18.41	18.88
	12H	5.57	6.12	6.05	6.60	7.08	17.35	17.90	17.83	18.38	18.85
8H	4H	4.55	5.17	5.02	5.62	6.09	17.26	17.88	17.73	18.33	18.80
	6H	6.11	6.62	6.62	7.12	7.60	17.25	17.76	17.75	18.25	18.74
	8H	6.91	7.37	7.43	7.88	8.38	17.26	17.72	17.78	18.23	18.73
	12H	7.76	8.16	8.27	8.65	9.23	17.32	17.72	17.84	18.22	18.79
12H	4H	4.77	5.32	5.26	5.80	6.28	17.22	17.77	17.70	18.25	18.73
	6H	6.48	6.94	7.01	7.46	7.95	17.20	17.66	17.73	18.18	18.67
	8H	7.48	7.88	7.99	8.38	8.95	17.25	17.65	17.77	18.15	18.72