

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: P1175412

Luminaire Tested: S125RDRP-H375D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1175412  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H375D840-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

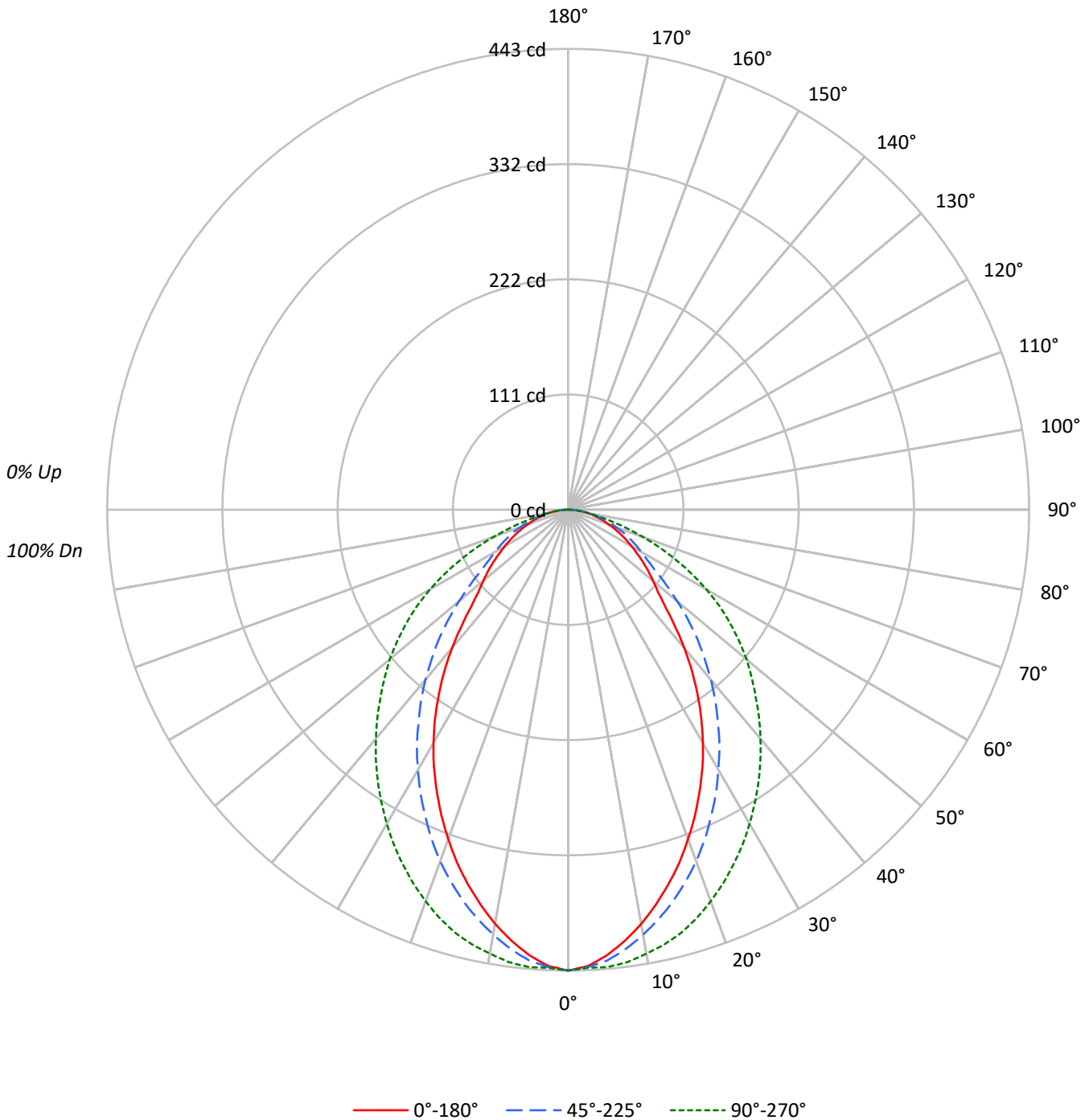
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 834.6 lumens  
Efficiency: N/A  
Efficacy: 71.3 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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

TEST NUMBER: P1175412

CATALOG NUMBER: S125RDRP-H375D840-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1175412

CATALOG NUMBER: S125RDRP-H375D840-X4F0-XX-UDD-WVL-W

**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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

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

	0°	45°	90°
0°	3050	3050	3050
5°	2971	3005	3049
10°	2827	2900	3029
15°	2657	2777	3000
20°	2469	2634	2935
25°	2268	2468	2857
30°	2058	2294	2772
35°	1821	2109	2680
40°	1562	1916	2582
45°	1281	1707	2483
50°	1140	1466	2397
55°	1052	1228	2276
60°	968	1118	2108
65°	901	1054	1862
70°	839	984	1522
75°	790	910	1141
80°	745	837	821
85°	687	829	687

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2483 cd/sqm



TEST NUMBER: P1175412

CATALOG NUMBER: S125RDRP-H375D840-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.0	4.9
10°-20°	110.6	13.2
20°-30°	152.1	18.2
30°-40°	161.3	19.3
40°-50°	141.2	16.9
50°-60°	108.3	13.0
60°-70°	72.2	8.6
70°-80°	37.0	4.4
80°-90°	11.0	1.3
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°	303.7	36.4
0°-40°	465.0	55.7
0°-60°	714.5	85.6
0°-90°	834.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	834.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	443	443	443	443	443	
5°	430	436	435	438	441	40
15°	373	381	390	408	421	104
25°	299	309	325	352	376	137
35°	217	227	251	288	319	135
45°	132	142	175	219	255	104
55°	88	90	102	152	190	79
65°	55	56	65	85	114	55
75°	30	32	34	36	43	32
85°	9	10	10	10	9	10
90°	0	0	0	0	0	



TEST NUMBER: P1175412

CATALOG NUMBER: S125RDRP-H375D840-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	443.0	443.0	443.0	443.0	443.0
2.5°	438.9	443.4	440.0	440.4	440.8
5°	429.9	435.5	434.8	437.8	441.2
7.5°	417.8	423.9	425.7	433.3	438.5
10°	404.3	411.1	414.8	426.1	433.3
12.5°	388.9	396.8	402.8	417.5	428.0
15°	372.7	381.4	389.6	408.1	420.8
17.5°	355.4	364.1	375.0	396.0	411.4
20°	337.0	346.4	359.5	382.1	400.5
22.5°	318.2	328.0	343.0	367.8	388.9
25°	298.6	308.8	324.9	352.4	376.1
27.5°	279.4	288.8	307.6	337.0	362.9
30°	258.8	268.5	288.5	320.8	348.6
32.5°	238.1	247.8	270.8	304.6	334.0
35°	216.6	226.8	250.9	287.7	318.9
37.5°	195.2	205.7	232.4	270.4	303.5
40°	173.8	185.0	213.2	253.1	287.3
42.5°	151.9	164.0	193.7	236.2	271.5
45°	131.6	142.5	175.3	218.9	255.0
47.5°	117.0	123.4	155.7	201.2	239.2
50°	106.4	109.4	136.9	184.3	223.8
52.5°	97.0	98.9	118.5	168.5	206.9
55°	87.6	89.5	102.3	151.9	189.6
57.5°	78.6	79.7	90.3	135.4	172.3
60°	70.3	71.1	81.2	118.8	153.1
62.5°	62.8	63.2	72.6	101.9	133.9
65°	55.3	55.7	64.7	85.0	114.3
67.5°	48.5	48.5	57.2	69.6	95.5
70°	41.7	41.7	48.9	56.4	75.6
72.5°	35.7	36.5	41.4	45.5	59.0
75°	29.7	31.6	34.2	36.1	42.9
77.5°	24.1	26.3	27.5	28.2	28.6
80°	18.8	20.3	21.1	21.4	20.7
82.5°	13.9	15.0	15.4	15.4	14.3
85°	8.7	9.8	10.5	10.2	8.7
87.5°	4.1	5.6	6.0	5.3	4.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1175412  
 CATALOG NUMBER: S125RDRP-H375D840-X4F0-XX-UDD-WVL-W

**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	10.49	11.99	10.85	12.30	12.62	14.52	16.01	14.88	16.33	16.64
	3H	12.07	13.42	12.45	13.75	14.11	15.90	17.25	16.28	17.58	17.94
	4H	12.72	13.98	13.12	14.33	14.71	16.31	17.57	16.71	17.92	18.30
	6H	13.23	14.39	13.64	14.76	15.15	16.51	17.68	16.93	18.05	18.44
	8H	13.41	14.52	13.84	14.91	15.31	16.57	17.68	17.00	18.07	18.47
	12H	13.53	14.60	13.97	14.98	15.41	16.61	17.67	17.04	18.05	18.48
4H	2H	11.26	12.52	11.66	12.87	13.25	14.65	15.91	15.05	16.25	16.63
	3H	13.04	14.09	13.45	14.49	14.89	16.22	17.26	16.63	17.66	18.06
	4H	13.81	14.75	14.24	15.17	15.60	16.72	17.67	17.16	18.08	18.52
	6H	14.45	15.27	14.91	15.71	16.17	17.05	17.87	17.51	18.31	18.77
	8H	14.68	15.44	15.14	15.89	16.35	17.15	17.92	17.61	18.36	18.83
	12H	14.85	15.53	15.33	16.01	16.48	17.22	17.91	17.71	18.39	18.86
8H	4H	14.19	14.96	14.66	15.40	15.87	16.83	17.59	17.29	18.04	18.50
	6H	14.97	15.60	15.47	16.09	16.57	17.24	17.88	17.74	18.37	18.85
	8H	15.29	15.85	15.80	16.36	16.85	17.40	17.97	17.92	18.48	18.97
	12H	15.55	16.05	16.06	16.54	17.11	17.54	18.04	18.05	18.54	19.10
12H	4H	14.23	14.92	14.71	15.39	15.87	16.82	17.51	17.31	17.99	18.46
	6H	15.04	15.61	15.56	16.12	16.61	17.26	17.82	17.77	18.33	18.82
	8H	15.43	15.93	15.94	16.42	16.99	17.47	17.97	17.98	18.46	19.02