

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: P1175432

Luminaire Tested: S125RDRP-H850D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175432
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-H850D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

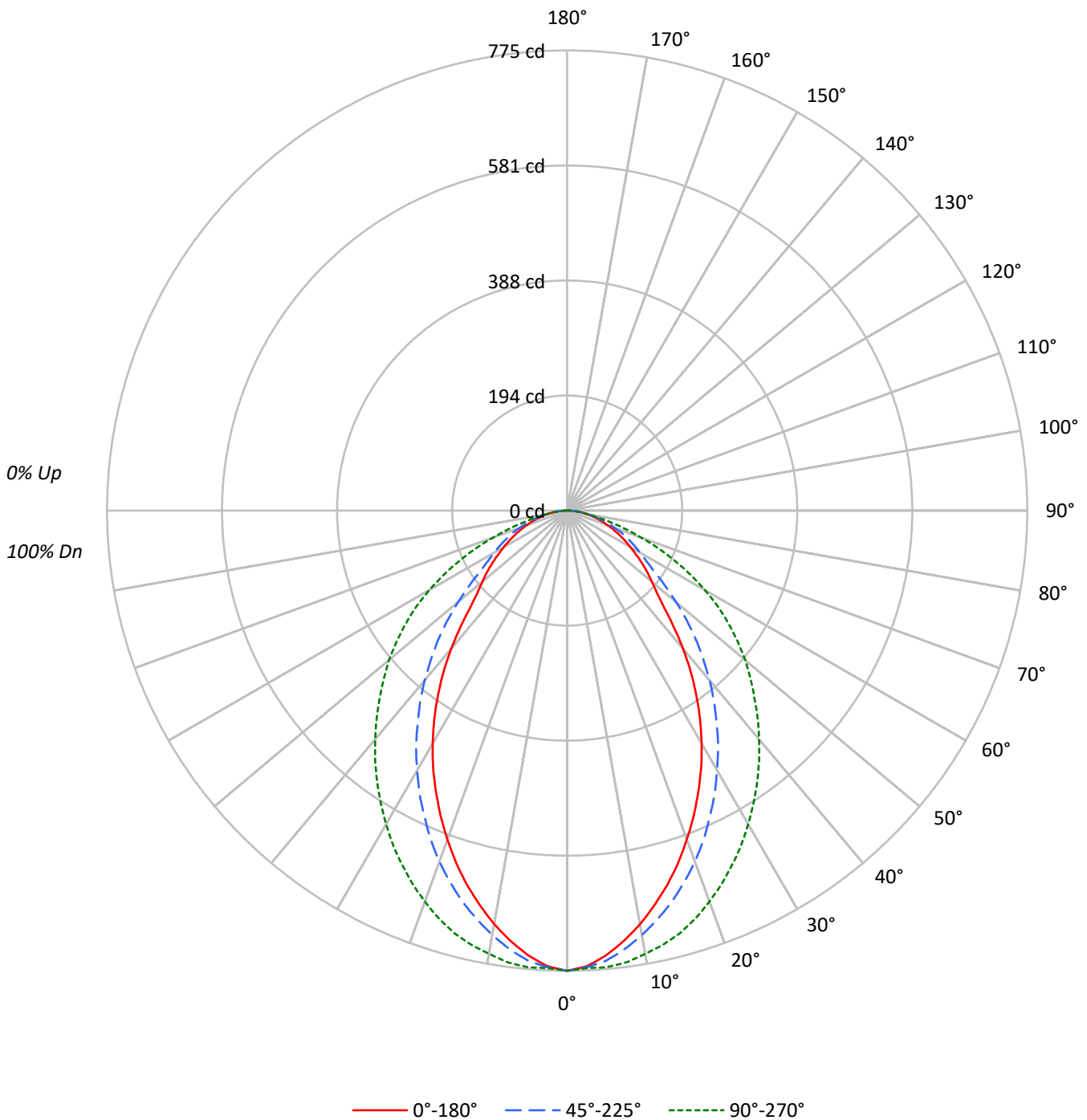
Lumens per Lamp: N/A
Luminaire Lumens: 1460.2 lumens
Efficiency: N/A
Efficacy: 62.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (A_{in}): 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: P1175432

CATALOG NUMBER: S125RDRP-H850D927-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1175432

CATALOG NUMBER: S125RDRP-H850D927-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°	5337	5337	5337
5°	5198	5257	5334
10°	4945	5074	5300
15°	4648	4859	5248
20°	4320	4609	5135
25°	3969	4319	4999
30°	3599	4013	4850
35°	3186	3689	4690
40°	2732	3353	4518
45°	2242	2985	4344
50°	1994	2565	4194
55°	1840	2149	3981
60°	1694	1957	3688
65°	1575	1844	3258
70°	1470	1721	2663
75°	1383	1593	1995
80°	1305	1459	1435
85°	1193	1454	1193

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4344 cd/sqm



TEST NUMBER: P1175432

CATALOG NUMBER: S125RDRP-H850D927-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	4.9
10°-20°	193.4	13.2
20°-30°	266.1	18.2
30°-40°	282.2	19.3
40°-50°	247.0	16.9
50°-60°	189.5	13.0
60°-70°	126.3	8.6
70°-80°	64.7	4.4
80°-90°	19.2	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°	531.3	36.4
0°-40°	813.5	55.7
0°-60°	1250.0	85.6
0°-90°	1460.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1460.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	752	762	761	766	772	70
15°	652	667	682	714	736	183
25°	522	540	568	616	658	240
35°	379	397	439	503	558	236
45°	230	249	307	383	446	182
55°	153	157	179	266	332	137
65°	97	97	113	149	200	96
75°	52	55	60	63	75	55
85°	15	17	18	18	15	17
90°	0	0	0	0	0	



TEST NUMBER: P1175432

CATALOG NUMBER: S125RDRP-H850D927-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	775.1	775.1	775.1	775.1	775.1
2.5°	767.9	775.8	769.8	770.5	771.2
5°	752.1	761.9	760.6	765.9	771.8
7.5°	731.0	741.5	744.8	758.0	767.2
10°	707.3	719.2	725.8	745.5	758.0
12.5°	680.4	694.2	704.7	730.4	748.8
15°	652.1	667.2	681.7	713.9	736.3
17.5°	621.8	636.9	656.0	692.9	719.8
20°	589.6	606.0	629.0	668.5	700.8
22.5°	556.7	573.8	600.1	643.5	680.4
25°	522.4	540.2	568.5	616.5	658.0
27.5°	488.9	505.3	538.2	589.6	635.0
30°	452.7	469.8	504.7	561.3	610.0
32.5°	416.5	433.6	473.7	533.0	584.3
35°	379.0	396.8	438.9	503.4	558.0
37.5°	341.5	359.9	406.6	473.1	531.0
40°	304.0	323.7	373.1	442.8	502.7
42.5°	265.8	286.9	338.9	413.2	475.1
45°	230.3	249.4	306.6	382.9	446.1
47.5°	204.6	215.8	272.4	352.0	418.5
50°	186.2	191.5	239.5	322.4	391.5
52.5°	169.8	173.0	207.3	294.8	361.9
55°	153.3	156.6	179.0	265.8	331.6
57.5°	137.5	139.5	157.9	236.9	301.4
60°	123.0	124.4	142.1	207.9	267.8
62.5°	109.9	110.5	127.0	178.3	234.2
65°	96.7	97.4	113.2	148.7	200.0
67.5°	84.9	84.9	100.0	121.7	167.1
70°	73.0	73.0	85.5	98.7	132.3
72.5°	62.5	63.8	72.4	79.6	103.3
75°	52.0	55.3	59.9	63.2	75.0
77.5°	42.1	46.1	48.0	49.3	50.0
80°	32.9	35.5	36.8	37.5	36.2
82.5°	24.3	26.3	27.0	27.0	25.0
85°	15.1	17.1	18.4	17.8	15.1
87.5°	7.2	9.9	10.5	9.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1175432

CATALOG NUMBER: S125RDRP-H850D927-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	12.43	13.93	12.80	14.25	14.56	16.46	17.96	16.82	18.27	18.59
	3H	14.02	15.36	14.40	15.69	16.05	17.85	19.19	18.22	19.52	19.88
	4H	14.66	15.92	15.06	16.27	16.65	18.25	19.51	18.65	19.86	20.24
	6H	15.17	16.34	15.59	16.70	17.10	18.46	19.62	18.87	19.99	20.38
	8H	15.35	16.46	15.78	16.85	17.25	18.52	19.62	18.94	20.01	20.41
	12H	15.48	16.54	15.91	16.92	17.35	18.55	19.61	18.98	19.99	20.42
4H	2H	13.20	14.46	13.60	14.81	15.19	16.59	17.85	16.99	18.20	18.58
	3H	14.99	16.03	15.40	16.43	16.83	18.16	19.20	18.57	19.61	20.01
	4H	15.75	16.70	16.19	17.11	17.55	18.67	19.61	19.10	20.03	20.46
	6H	16.39	17.21	16.85	17.66	18.12	18.99	19.81	19.45	20.26	20.72
	8H	16.62	17.39	17.09	17.83	18.30	19.09	19.86	19.56	20.30	20.77
	12H	16.79	17.48	17.28	17.96	18.43	19.17	19.85	19.65	20.33	20.80
8H	4H	16.14	16.90	16.60	17.35	17.81	18.77	19.53	19.23	19.98	20.45
	6H	16.91	17.55	17.41	18.04	18.52	19.19	19.82	19.68	20.31	20.79
	8H	17.23	17.80	17.74	18.31	18.80	19.35	19.91	19.86	20.42	20.91
	12H	17.49	17.99	18.00	18.48	19.05	19.48	19.99	19.99	20.48	21.04
12H	4H	16.18	16.86	16.66	17.34	17.81	18.77	19.45	19.25	19.93	20.40
	6H	16.99	17.56	17.50	18.07	18.56	19.20	19.77	19.71	20.28	20.77
	8H	17.37	17.87	17.88	18.37	18.93	19.41	19.91	19.92	20.40	20.97