

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: P1175422

Luminaire Tested: S125RDRP-H610D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175422
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-H610D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

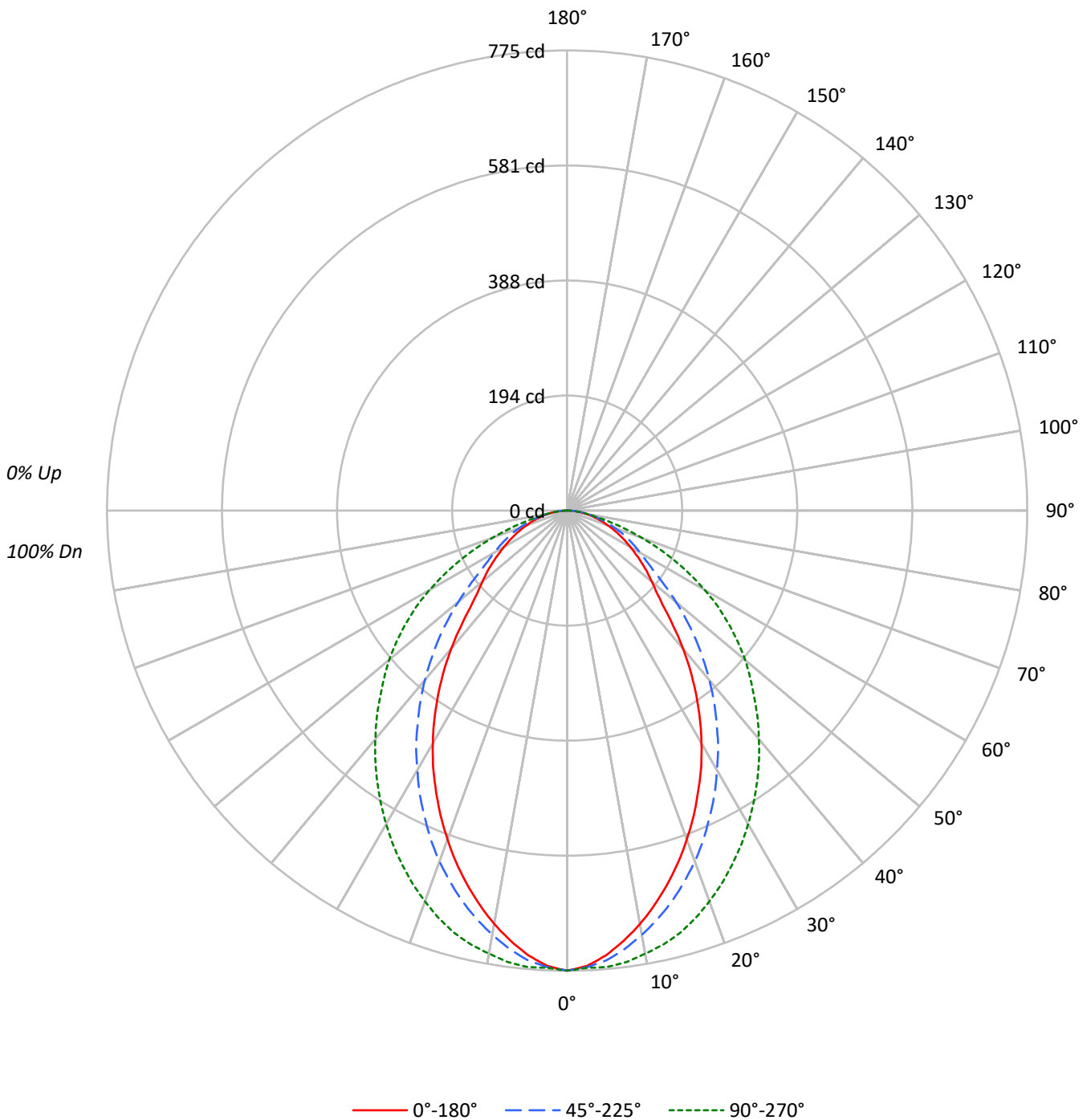
Lumens per Lamp: N/A
Luminaire Lumens: 1459.6 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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

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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	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°	5335	5335	5335
5°	5196	5255	5332
10°	4944	5072	5297
15°	4646	4857	5246
20°	4318	4607	5133
25°	3967	4317	4997
30°	3598	4011	4847
35°	3184	3687	4688
40°	2731	3352	4516
45°	2242	2984	4342
50°	1993	2564	4191
55°	1839	2148	3979
60°	1694	1957	3686
65°	1575	1843	3257
70°	1470	1721	2661
75°	1383	1593	1995
80°	1305	1459	1435
85°	1193	1454	1193

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4342 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	4.9
10°-20°	193.3	13.2
20°-30°	266.0	18.2
30°-40°	282.1	19.3
40°-50°	246.9	16.9
50°-60°	189.5	13.0
60°-70°	126.2	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°	531.0	36.4
0°-40°	813.2	55.7
0°-60°	1249.5	85.6
0°-90°	1459.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1459.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	752	762	760	766	772	70
15°	652	667	681	714	736	183
25°	522	540	568	616	658	240
35°	379	397	439	503	558	236
45°	230	249	306	383	446	182
55°	153	156	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	774.8	774.8	774.8	774.8	774.8
2.5°	767.6	775.5	769.5	770.2	770.8
5°	751.8	761.6	760.3	765.6	771.5
7.5°	730.7	741.3	744.5	757.7	766.9
10°	707.1	718.9	725.5	745.2	757.7
12.5°	680.1	693.9	704.4	730.1	748.5
15°	651.8	666.9	681.4	713.6	736.0
17.5°	621.5	636.7	655.7	692.6	719.5
20°	589.3	605.8	628.8	668.2	700.5
22.5°	556.4	573.5	599.8	643.3	680.1
25°	522.2	540.0	568.3	616.3	657.7
27.5°	488.7	505.1	538.0	589.3	634.7
30°	452.5	469.6	504.5	561.0	609.7
32.5°	416.3	433.4	473.6	532.8	584.1
35°	378.8	396.6	438.7	503.2	557.7
37.5°	341.4	359.8	406.5	472.9	530.8
40°	303.9	323.6	372.9	442.6	502.5
42.5°	265.7	286.8	338.7	413.0	474.9
45°	230.2	249.3	306.5	382.8	445.9
47.5°	204.6	215.7	272.3	351.9	418.3
50°	186.1	191.4	239.4	322.3	391.3
52.5°	169.7	173.0	207.2	294.7	361.7
55°	153.2	156.5	178.9	265.7	331.5
57.5°	137.5	139.4	157.9	236.8	301.2
60°	123.0	124.3	142.1	207.8	267.7
62.5°	109.8	110.5	126.9	178.2	234.1
65°	96.7	97.3	113.1	148.6	199.9
67.5°	84.8	84.8	100.0	121.7	167.1
70°	73.0	73.0	85.5	98.7	132.2
72.5°	62.5	63.8	72.3	79.6	103.3
75°	52.0	55.2	59.9	63.1	75.0
77.5°	42.1	46.0	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



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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	12.43	13.93	12.80	14.24	14.56	16.46	17.96	16.82	18.27	18.58
	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	16.33	15.58	16.70	17.09	18.46	19.62	18.87	19.99	20.38
	8H	15.35	16.46	15.78	16.85	17.25	18.51	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	14.98	16.03	15.39	16.43	16.83	18.16	19.20	18.57	19.60	20.01
	4H	15.75	16.69	16.18	17.11	17.55	18.67	19.61	19.10	20.02	20.46
	6H	16.39	17.21	16.85	17.65	18.11	18.99	19.81	19.45	20.26	20.72
	8H	16.62	17.38	17.08	17.83	18.30	19.09	19.86	19.56	20.30	20.77
	12H	16.79	17.47	17.27	17.95	18.42	19.17	19.85	19.65	20.33	20.80
8H	4H	16.13	16.90	16.60	17.34	17.81	18.77	19.53	19.23	19.98	20.44
	6H	16.91	17.54	17.41	18.04	18.51	19.19	19.82	19.68	20.31	20.79
	8H	17.23	17.79	17.74	18.31	18.79	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	16.17	16.86	16.66	17.34	17.81	18.77	19.45	19.25	19.93	20.40
	6H	16.99	17.55	17.50	18.06	18.55	19.20	19.77	19.71	20.28	20.77
	8H	17.37	17.87	17.88	18.36	18.93	19.41	19.91	19.92	20.40	20.97