

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: P1175413

Luminaire Tested: S125RDRP-H375D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175413
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-H375D850-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

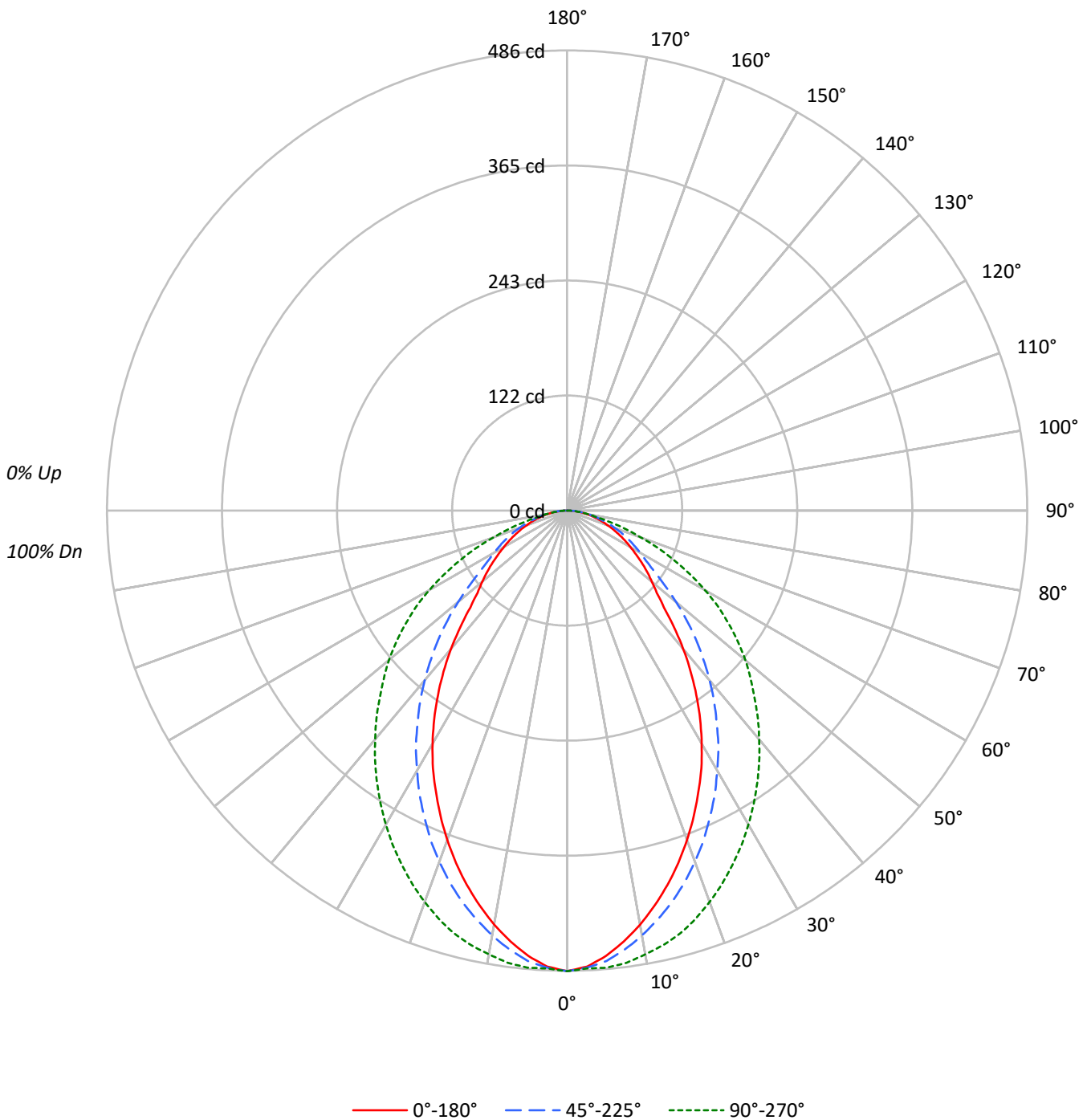
Lumens per Lamp: N/A
Luminaire Lumens: 916.6 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): 120
Input Current (A_{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°	3350	3350	3350
5°	3263	3300	3349
10°	3104	3185	3327
15°	2918	3050	3295
20°	2712	2893	3223
25°	2491	2711	3138
30°	2260	2519	3044
35°	2000	2316	2944
40°	1715	2105	2836
45°	1408	1874	2726
50°	1252	1610	2632
55°	1155	1348	2499
60°	1063	1228	2315
65°	989	1157	2046
70°	922	1081	1671
75°	867	1000	1253
80°	821	916	900
85°	750	916	750

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2726 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	4.9
10°-20°	121.4	13.2
20°-30°	167.0	18.2
30°-40°	177.2	19.3
40°-50°	155.1	16.9
50°-60°	119.0	13.0
60°-70°	79.2	8.6
70°-80°	40.6	4.4
80°-90°	12.1	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°	333.5	36.4
0°-40°	510.6	55.7
0°-60°	784.7	85.6
0°-90°	916.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	916.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	472	478	477	481	484	44
15°	409	419	428	448	462	115
25°	328	339	357	387	413	151
35°	238	249	276	316	350	148
45°	145	156	192	240	280	114
55°	96	98	112	167	208	86
65°	61	61	71	93	126	60
75°	33	35	38	40	47	35
85°	10	11	12	11	10	11
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	486.5	486.5	486.5	486.5	486.5
2.5°	482.0	486.9	483.2	483.6	484.0
5°	472.1	478.3	477.4	480.7	484.5
7.5°	458.9	465.5	467.5	475.8	481.6
10°	444.0	451.4	455.6	467.9	475.8
12.5°	427.1	435.7	442.3	458.4	470.0
15°	409.3	418.8	427.9	448.1	462.2
17.5°	390.3	399.8	411.8	434.9	451.8
20°	370.1	380.4	394.8	419.6	439.9
22.5°	349.4	360.1	376.7	403.9	427.1
25°	327.9	339.1	356.8	387.0	413.0
27.5°	306.9	317.2	337.8	370.1	398.6
30°	284.2	294.9	316.8	352.3	382.9
32.5°	261.4	272.2	297.4	334.5	366.8
35°	237.9	249.0	275.5	316.0	350.2
37.5°	214.4	225.9	255.2	297.0	333.3
40°	190.8	203.2	234.2	278.0	315.5
42.5°	166.9	180.1	212.7	259.4	298.2
45°	144.6	156.5	192.5	240.4	280.0
47.5°	128.4	135.5	171.0	221.0	262.7
50°	116.9	120.2	150.3	202.4	245.7
52.5°	106.6	108.6	130.1	185.0	227.2
55°	96.2	98.3	112.3	166.9	208.2
57.5°	86.3	87.6	99.1	148.7	189.2
60°	77.2	78.1	89.2	130.5	168.1
62.5°	69.0	69.4	79.7	111.9	147.0
65°	60.7	61.1	71.0	93.3	125.6
67.5°	53.3	53.3	62.8	76.4	104.9
70°	45.8	45.8	53.7	62.0	83.0
72.5°	39.2	40.1	45.4	50.0	64.8
75°	32.6	34.7	37.6	39.6	47.1
77.5°	26.4	28.9	30.1	31.0	31.4
80°	20.7	22.3	23.1	23.5	22.7
82.5°	15.3	16.5	16.9	16.9	15.7
85°	9.5	10.7	11.6	11.2	9.5
87.5°	4.5	6.2	6.6	5.8	4.5
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	10.82	12.32	11.18	12.63	12.94	14.84	16.34	15.21	16.65	16.97
	3H	12.40	13.75	12.78	14.08	14.44	16.23	17.57	16.61	17.90	18.26
	4H	13.05	14.31	13.45	14.66	15.03	16.63	17.89	17.03	18.24	18.62
	6H	13.56	14.72	13.97	15.09	15.48	16.84	18.00	17.25	18.37	18.76
	8H	13.74	14.84	14.16	15.23	15.64	16.90	18.01	17.32	18.40	18.80
	12H	13.86	14.92	14.29	15.31	15.73	16.93	17.99	17.36	18.37	18.80
4H	2H	11.59	12.85	11.99	13.20	13.57	14.97	16.23	15.37	16.58	16.96
	3H	13.37	14.41	13.78	14.81	15.22	16.54	17.59	16.95	17.99	18.39
	4H	14.13	15.08	14.57	15.49	15.93	17.05	17.99	17.48	18.41	18.85
	6H	14.78	15.59	15.23	16.04	16.50	17.38	18.20	17.83	18.64	19.10
	8H	15.00	15.77	15.47	16.21	16.68	17.48	18.24	17.94	18.69	19.15
	12H	15.18	15.86	15.66	16.34	16.81	17.55	18.23	18.03	18.71	19.18
8H	4H	14.52	15.28	14.98	15.73	16.20	17.15	17.92	17.61	18.36	18.83
	6H	15.30	15.93	15.79	16.42	16.90	17.57	18.20	18.07	18.69	19.17
	8H	15.61	16.18	16.13	16.69	17.18	17.73	18.30	18.24	18.81	19.29
	12H	15.87	16.37	16.38	16.87	17.43	17.87	18.37	18.38	18.86	19.42
12H	4H	14.56	15.24	15.04	15.72	16.19	17.15	17.83	17.63	18.31	18.78
	6H	15.37	15.94	15.88	16.45	16.94	17.58	18.15	18.09	18.66	19.15
	8H	15.75	16.26	16.26	16.75	17.31	17.79	18.29	18.30	18.78	19.35