

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: P1175429

Luminaire Tested: S125RDRP-H850D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175429
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-H850D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

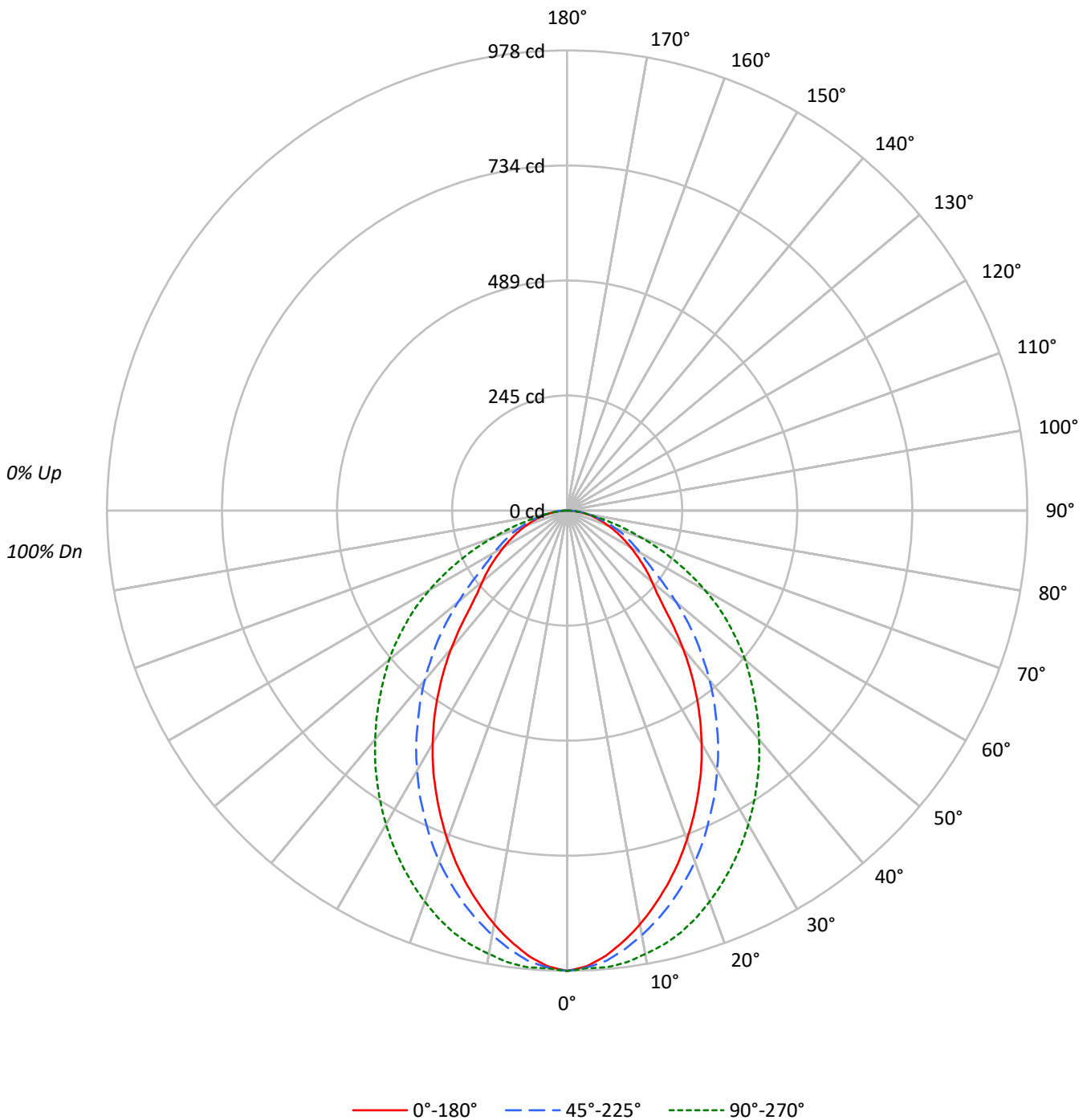
Lumens per Lamp: N/A
Luminaire Lumens: 1843.3 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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													100															
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86													86															
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74													74															
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64													64															
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56													56															
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50													50															
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44													44															
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40													40															
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36													36															
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33													33															
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30													30															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6737	6737	6737
5°	6562	6636	6734
10°	6243	6405	6689
15°	5867	6134	6625
20°	5453	5818	6482
25°	5010	5452	6310
30°	4544	5065	6122
35°	4021	4657	5920
40°	3449	4232	5704
45°	2831	3769	5483
50°	2518	3238	5294
55°	2323	2712	5025
60°	2139	2470	4656
65°	1989	2328	4114
70°	1856	2174	3362
75°	1745	2011	2519
80°	1645	1844	1812
85°	1509	1841	1509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5483 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	4.9
10°-20°	244.2	13.2
20°-30°	335.9	18.2
30°-40°	356.3	19.3
40°-50°	311.8	16.9
50°-60°	239.3	13.0
60°-70°	159.4	8.6
70°-80°	81.7	4.4
80°-90°	24.3	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°	670.6	36.4
0°-40°	1026.9	55.7
0°-60°	1578.0	85.6
0°-90°	1843.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1843.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	949	962	960	967	974	89
15°	823	842	860	901	929	231
25°	660	682	718	778	831	303
35°	478	501	554	635	704	298
45°	291	315	387	483	563	230
55°	194	198	226	336	419	173
65°	122	123	143	188	252	122
75°	66	70	76	80	95	70
85°	19	22	23	22	19	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	978.4	978.4	978.4	978.4	978.4
2.5°	969.3	979.3	971.8	972.6	973.5
5°	949.4	961.8	960.2	966.8	974.3
7.5°	922.8	936.1	940.2	956.8	968.5
10°	892.9	907.8	916.1	941.1	956.8
12.5°	858.8	876.3	889.6	922.0	945.2
15°	823.1	842.2	860.5	901.2	929.4
17.5°	784.9	804.0	828.1	874.6	908.7
20°	744.2	765.0	794.1	843.9	884.6
22.5°	702.7	724.3	757.5	812.3	858.8
25°	659.5	681.9	717.6	778.3	830.6
27.5°	617.1	637.9	679.4	744.2	801.5
30°	571.5	593.0	637.1	708.5	770.0
32.5°	525.8	547.4	598.0	672.8	737.6
35°	478.4	500.9	554.0	635.4	704.3
37.5°	431.1	454.3	513.3	597.2	670.3
40°	383.7	408.7	470.9	559.0	634.6
42.5°	335.6	362.1	427.8	521.6	599.7
45°	290.7	314.8	387.1	483.4	563.1
47.5°	258.3	272.4	343.9	444.4	528.3
50°	235.1	241.7	302.3	407.0	494.2
52.5°	214.3	218.4	261.6	372.1	456.8
55°	193.5	197.7	225.9	335.6	418.6
57.5°	173.6	176.1	199.3	299.0	380.4
60°	155.3	157.0	179.4	262.5	338.1
62.5°	138.7	139.5	160.3	225.1	295.7
65°	122.1	122.9	142.9	187.7	252.5
67.5°	107.1	107.1	126.3	153.7	211.0
70°	92.2	92.2	108.0	124.6	167.0
72.5°	78.9	80.6	91.4	100.5	130.4
75°	65.6	69.8	75.6	79.7	94.7
77.5°	53.2	58.1	60.6	62.3	63.1
80°	41.5	44.9	46.5	47.3	45.7
82.5°	30.7	33.2	34.1	34.1	31.6
85°	19.1	21.6	23.3	22.4	19.1
87.5°	9.1	12.5	13.3	11.6	9.1
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	13.24	14.74	13.61	15.06	15.37	17.27	18.77	17.63	19.08	19.39
	3H	14.83	16.17	15.21	16.50	16.86	18.66	20.00	19.03	20.33	20.69
	4H	15.47	16.73	15.87	17.08	17.46	19.06	20.32	19.46	20.67	21.05
	6H	15.98	17.15	16.39	17.51	17.91	19.27	20.43	19.68	20.80	21.19
	8H	16.16	17.27	16.59	17.66	18.06	19.32	20.43	19.75	20.82	21.22
	12H	16.29	17.35	16.72	17.73	18.16	19.36	20.42	19.79	20.80	21.23
4H	2H	14.01	15.27	14.41	15.62	16.00	17.40	18.66	17.80	19.01	19.39
	3H	15.79	16.84	16.21	17.24	17.64	18.97	20.01	19.38	20.41	20.82
	4H	16.56	17.50	17.00	17.92	18.36	19.48	20.42	19.91	20.83	21.27
	6H	17.20	18.02	17.66	18.46	18.93	19.80	20.62	20.26	21.07	21.53
	8H	17.43	18.20	17.90	18.64	19.11	19.90	20.67	20.37	21.11	21.58
	12H	17.60	18.29	18.09	18.77	19.24	19.98	20.66	20.46	21.14	21.61
8H	4H	16.95	17.71	17.41	18.16	18.62	19.58	20.34	20.04	20.79	21.26
	6H	17.72	18.36	18.22	18.85	19.33	20.00	20.63	20.49	21.12	21.60
	8H	18.04	18.61	18.55	19.12	19.61	20.16	20.72	20.67	21.23	21.72
	12H	18.30	18.80	18.81	19.30	19.86	20.29	20.80	20.80	21.29	21.85
12H	4H	16.99	17.67	17.47	18.15	18.62	19.58	20.26	20.06	20.74	21.21
	6H	17.80	18.37	18.31	18.88	19.37	20.01	20.58	20.52	21.09	21.58
	8H	18.18	18.68	18.69	19.18	19.74	20.22	20.72	20.73	21.21	21.78