

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: P1061773

Luminaire Tested: S125RDRP-S850D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061773
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

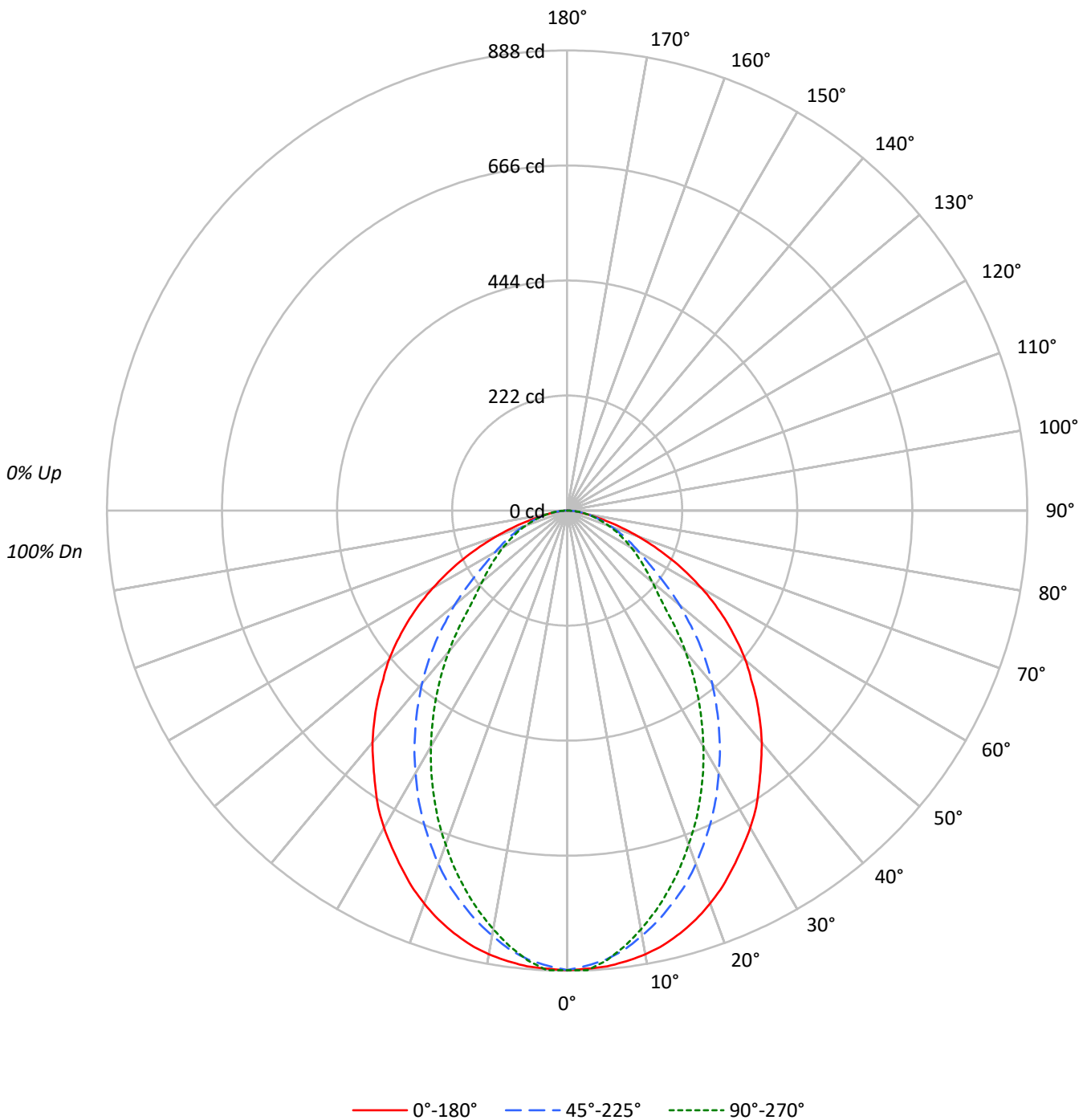
Lumens per Lamp: N/A
Luminaire Lumens: 1680.0 lumens
Efficiency: N/A
Efficacy: 65.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6106	6106	6106
5°	6103	6010	6023
10°	6079	5823	5736
15°	6019	5593	5402
20°	5912	5319	5023
25°	5764	5003	4623
30°	5619	4647	4180
35°	5431	4289	3707
40°	5254	3912	3193
45°	5035	3498	2615
50°	4817	3032	2290
55°	4520	2532	2115
60°	4124	2214	1976
65°	3609	2023	1836
70°	2927	1822	1705
75°	2102	1665	1588
80°	1451	1491	1491
85°	1066	1296	1367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5035 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	4.9
10°-20°	223.0	13.3
20°-30°	308.2	18.3
30°-40°	328.3	19.5
40°-50°	288.4	17.2
50°-60°	218.7	13.0
60°-70°	142.0	8.5
70°-80°	70.4	4.2
80°-90°	18.4	1.1
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°	613.7	36.5
0°-40°	942.0	56.1
0°-60°	1449.2	86.3
0°-90°	1680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	883	881	870	872	871	84
15°	844	825	785	766	758	238
25°	759	717	659	625	608	350
35°	646	586	510	464	441	404
45°	517	445	359	295	269	399
55°	376	302	211	182	176	336
65°	222	165	124	115	113	219
75°	79	69	63	61	60	88
85°	14	15	16	16	17	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	886.8	886.8	886.8	886.8	886.8
2.5°	884.9	886.8	879.1	885.8	887.8
5°	883.0	881.0	869.5	872.4	871.4
7.5°	877.2	873.3	854.1	852.1	848.3
10°	869.5	859.8	832.9	826.1	820.4
12.5°	858.9	843.5	810.7	797.3	790.5
15°	844.4	825.2	784.7	766.4	757.8
17.5°	827.1	800.2	757.8	732.7	723.1
20°	806.9	775.1	726.0	697.1	685.6
22.5°	784.7	747.2	692.3	661.5	649.0
25°	758.7	717.3	658.6	624.9	608.5
27.5°	732.7	686.5	623.0	585.4	568.1
30°	706.8	653.8	584.5	544.0	525.7
32.5°	678.8	620.1	548.8	504.5	483.4
35°	646.1	586.4	510.3	464.1	441.0
37.5°	614.3	550.8	472.8	420.8	398.6
40°	584.5	517.1	435.2	378.4	355.3
42.5°	550.8	481.4	397.7	338.0	312.0
45°	517.1	444.8	359.2	294.6	268.6
47.5°	481.4	410.2	318.7	255.2	237.8
50°	449.7	374.6	283.1	225.3	213.8
52.5°	413.1	339.9	246.5	202.2	194.5
55°	376.5	302.3	210.9	182.0	176.2
57.5°	338.9	268.6	182.9	164.7	158.9
60°	299.5	234.0	160.8	146.4	143.5
62.5°	260.0	198.4	141.5	131.0	127.1
65°	221.5	164.7	124.2	114.6	112.7
67.5°	182.0	133.8	106.9	100.1	99.2
70°	145.4	108.8	90.5	86.7	84.7
72.5°	111.7	86.7	76.1	73.2	72.2
75°	79.0	69.3	62.6	60.7	59.7
77.5°	53.0	53.0	50.1	48.1	49.1
80°	36.6	38.5	37.6	37.6	37.6
82.5°	24.1	26.0	27.0	27.0	27.0
85°	13.5	15.4	16.4	16.4	17.3
87.5°	4.8	5.8	6.7	7.7	7.7
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	16.84	18.33	17.20	18.64	18.96	13.08	14.57	13.45	14.89	15.20
	3H	18.15	19.49	18.53	19.81	20.18	14.66	16.00	15.04	16.33	16.69
	4H	18.52	19.77	18.92	20.12	20.50	15.27	16.52	15.67	16.87	17.25
	6H	18.70	19.85	19.11	20.22	20.61	15.74	16.90	16.15	17.26	17.65
	8H	18.73	19.83	19.16	20.22	20.62	15.90	17.00	16.33	17.39	17.79
	12H	18.75	19.80	19.18	20.18	20.61	16.01	17.06	16.44	17.45	17.88
4H	2H	16.95	18.20	17.35	18.55	18.93	13.74	15.00	14.14	15.34	15.72
	3H	18.44	19.48	18.85	19.88	20.28	15.52	16.56	15.94	16.96	17.36
	4H	18.91	19.85	19.35	20.26	20.70	16.24	17.18	16.68	17.59	18.03
	6H	19.20	20.01	19.66	20.45	20.91	16.83	17.64	17.29	18.09	18.55
	8H	19.27	20.03	19.73	20.47	20.94	17.04	17.79	17.50	18.24	18.71
	12H	19.31	19.98	19.79	20.46	20.94	17.19	17.87	17.67	18.35	18.82
8H	4H	19.00	19.75	19.46	20.20	20.67	16.55	17.31	17.02	17.76	18.22
	6H	19.36	19.98	19.86	20.48	20.95	17.26	17.89	17.76	18.38	18.86
	8H	19.48	20.04	19.99	20.55	21.04	17.54	18.10	18.06	18.61	19.10
	12H	19.56	20.06	20.07	20.55	21.12	17.77	18.27	18.28	18.76	19.32
12H	4H	18.99	19.67	19.47	20.15	20.62	16.58	17.26	17.06	17.73	18.21
	6H	19.36	19.92	19.88	20.44	20.92	17.31	17.87	17.83	18.38	18.87
	8H	19.52	20.02	20.03	20.51	21.08	17.65	18.14	18.16	18.64	19.20