

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061947

Luminaire Tested: S125RDR-H1270D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061947
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

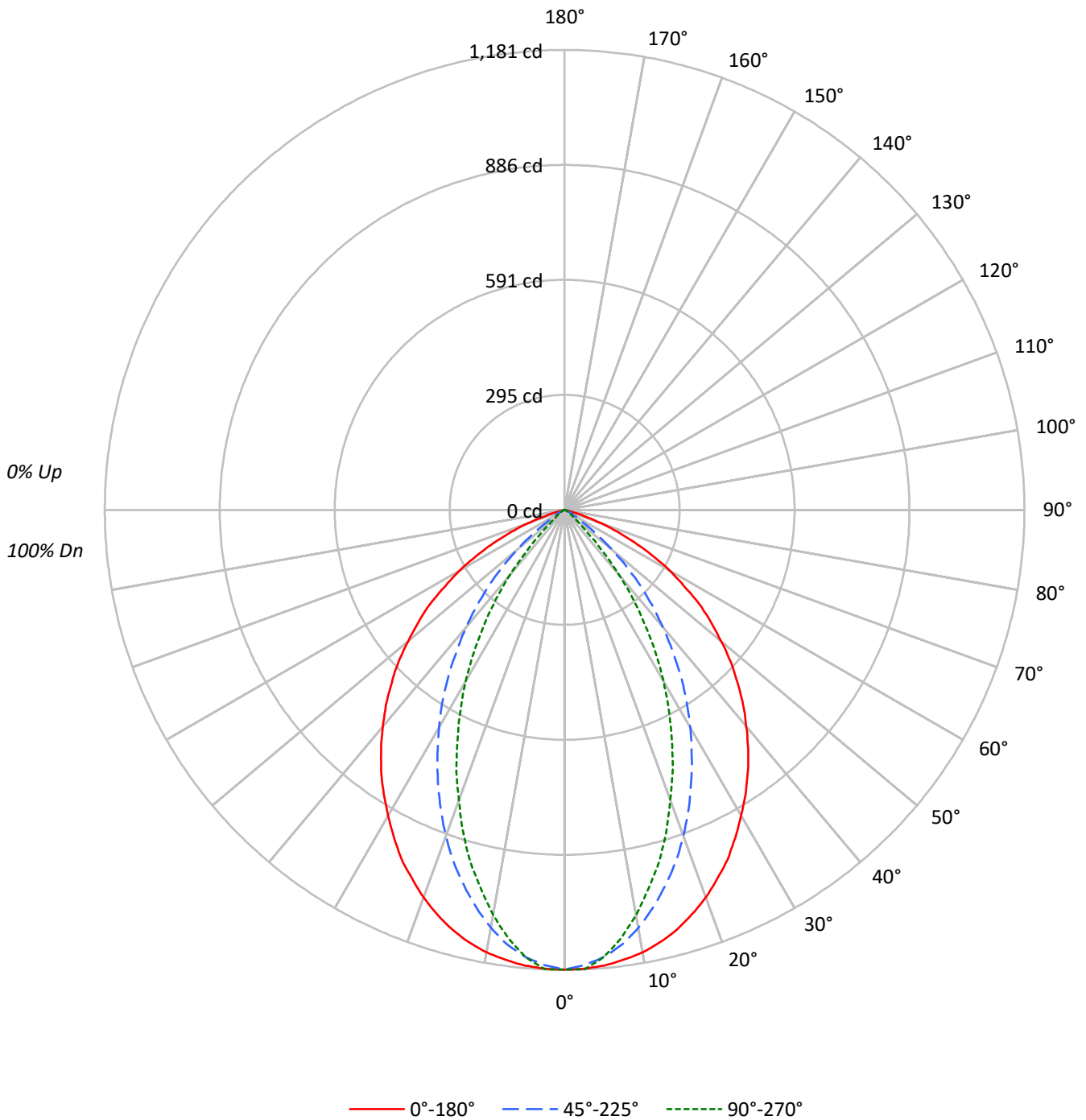
Lumens per Lamp: N/A
Luminaire Lumens: 1525.5 lumens
Efficiency: N/A
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): 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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8130	8130	8130
5°	8118	7968	7968
10°	8070	7623	7384
15°	7951	7117	6673
20°	7762	6529	5810
25°	7526	5846	4947
30°	7208	5127	4037
35°	6901	4373	3024
40°	6524	3529	1960
45°	6113	2670	849
50°	5624	1702	317
55°	5068	748	224
60°	4291	322	150
65°	3249	204	77
70°	1975	95	32
75°	415	43	43
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6113 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.8	7.1
10°-20°	283.8	18.6
20°-30°	364.3	23.9
30°-40°	343.0	22.5
40°-50°	239.8	15.7
50°-60°	128.1	8.4
60°-70°	51.1	3.3
70°-80°	6.6	0.4
80°-90°	0.0	0.0
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°	756.9	49.6
0°-40°	1099.9	72.1
0°-60°	1467.8	96.2
0°-90°	1525.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1525.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1181	1181	1181	1181	1181	
5°	1175	1172	1153	1156	1153	111
15°	1115	1080	998	952	936	314
25°	991	904	770	685	651	455
35°	821	690	520	402	360	512
45°	628	470	274	132	87	484
55°	422	259	62	22	19	374
65°	199	79	12	6	5	198
75°	16	5	2	2	2	30
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.8	1180.8	1180.8	1180.8	1180.8
2.5°	1179.2	1180.8	1169.9	1179.2	1180.8
5°	1174.6	1171.5	1152.8	1155.9	1152.8
7.5°	1165.2	1157.4	1126.3	1115.4	1109.1
10°	1154.3	1137.2	1090.4	1067.1	1056.2
12.5°	1137.2	1112.3	1046.8	1011.0	995.4
15°	1115.4	1079.5	998.5	951.8	936.2
17.5°	1088.9	1042.2	948.7	891.1	867.7
20°	1059.3	997.0	891.1	822.5	792.9
22.5°	1025.0	953.4	831.9	755.5	725.9
25°	990.7	903.5	769.5	685.4	651.2
27.5°	948.7	852.1	707.2	616.9	579.5
30°	906.6	800.7	644.9	546.8	507.8
32.5°	864.6	746.2	582.6	473.6	434.6
35°	821.0	690.1	520.3	401.9	359.8
37.5°	774.2	634.0	453.3	333.4	289.7
40°	725.9	579.5	392.6	266.4	218.1
42.5°	679.2	525.0	331.8	201.0	148.0
45°	627.8	470.5	274.2	132.4	87.2
47.5°	579.5	417.5	215.0	76.3	45.2
50°	525.0	363.0	158.9	40.5	29.6
52.5°	473.6	310.0	105.9	26.5	23.4
55°	422.2	258.6	62.3	21.8	18.7
57.5°	363.0	208.7	34.3	17.1	14.0
60°	311.6	163.6	23.4	12.5	10.9
62.5°	252.4	119.9	17.1	9.3	7.8
65°	199.4	79.4	12.5	6.2	4.7
67.5°	148.0	46.7	7.8	3.1	3.1
70°	98.1	24.9	4.7	1.6	1.6
72.5°	51.4	10.9	3.1	1.6	1.6
75°	15.6	4.7	1.6	1.6	1.6
77.5°	0.0	1.6	0.0	0.0	1.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	16.22	17.49	16.59	17.80	18.11	0.00	0.00	0.00	0.00	0.00
	3H	16.81	17.92	17.19	18.25	18.62	0.00	0.00	0.00	0.00	0.00
	4H	16.77	17.80	17.18	18.16	18.54	0.00	0.00	0.00	0.00	0.00
	6H	16.69	17.63	17.10	18.00	18.40	0.00	0.00	0.00	0.00	0.00
	8H	16.64	17.53	17.07	17.92	18.33	0.00	0.00	0.00	0.00	0.00
	12H	16.59	17.45	17.03	17.83	18.26	0.00	0.00	0.00	0.00	0.00
4H	2H	16.00	17.03	16.40	17.38	17.77	0.00	0.00	0.00	0.00	0.15
	3H	16.59	17.42	17.00	17.83	18.23	0.00	0.00	0.00	0.00	0.06
	4H	16.54	17.28	16.97	17.70	18.15	0.00	0.00	0.00	0.00	0.01
	6H	16.45	17.09	16.92	17.54	18.00	0.00	0.00	0.00	0.00	0.00
	8H	16.39	16.98	16.86	17.43	17.91	0.00	0.00	0.00	0.00	0.00
	12H	16.34	16.86	16.83	17.35	17.82	0.00	0.00	0.00	0.00	0.00
8H	4H	16.39	16.98	16.86	17.43	17.91	0.00	0.00	0.00	0.00	0.15
	6H	16.28	16.77	16.79	17.26	17.75	0.00	0.00	0.00	0.00	0.02
	8H	16.22	16.65	16.74	17.17	17.66	0.00	0.00	0.00	0.00	0.00
	12H	16.17	16.55	16.69	17.05	17.62	0.00	0.00	0.00	0.00	0.00
12H	4H	16.34	16.86	16.83	17.35	17.82	0.00	0.00	0.00	0.00	0.07
	6H	16.22	16.65	16.74	17.17	17.66	0.00	0.00	0.00	0.00	0.00
	8H	16.17	16.55	16.69	17.05	17.62	0.00	0.00	0.00	0.00	0.00