

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: P1061929

Luminaire Tested: S125RDR-H1270D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061929
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-H1270D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

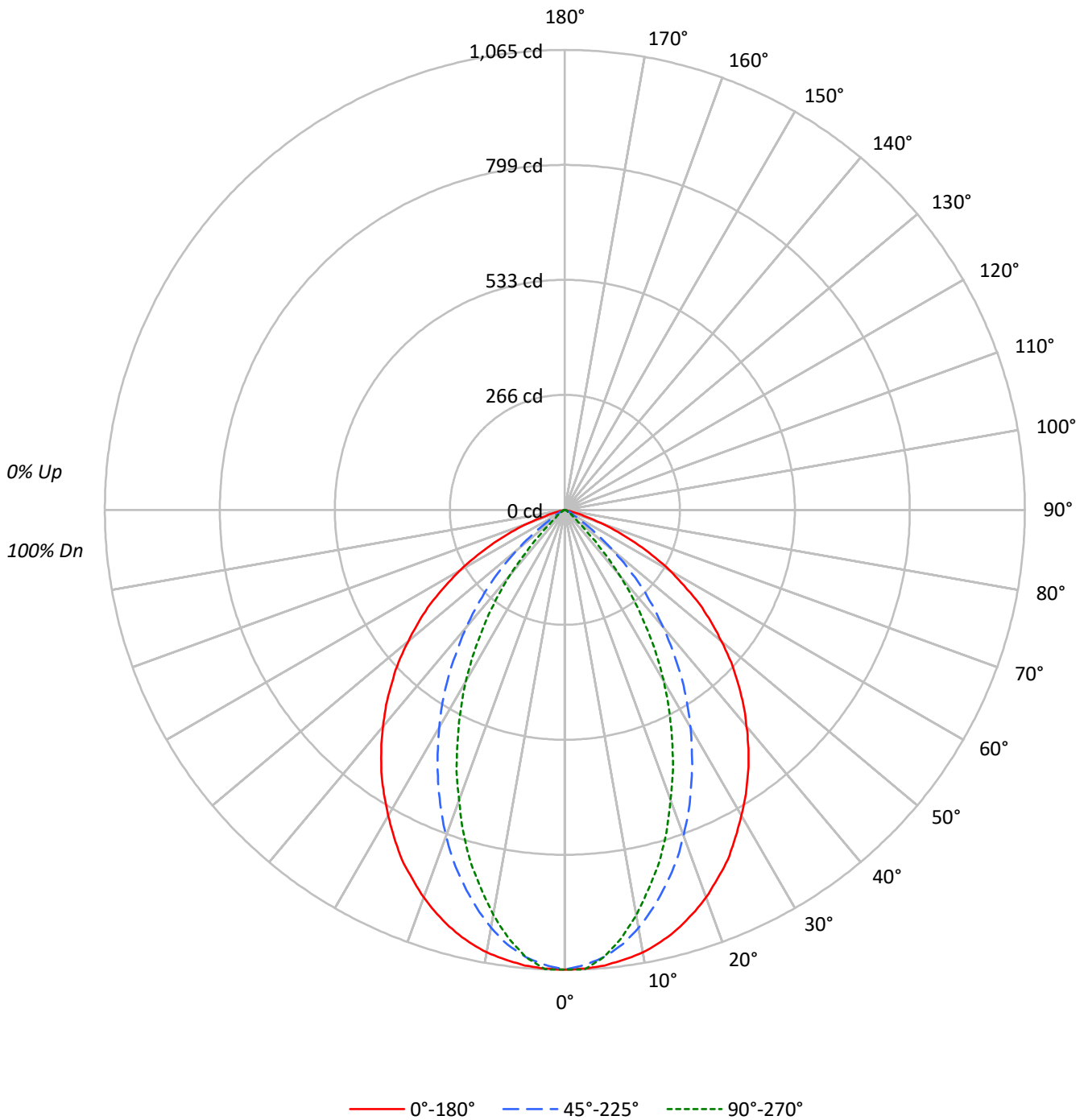
Lumens per Lamp: N/A
Luminaire Lumens: 1375.5 lumens
Efficiency: N/A
Efficacy: 37.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7331	7331	7331
5°	7320	7185	7185
10°	7277	6875	6659
15°	7169	6418	6018
20°	6999	5887	5239
25°	6787	5272	4461
30°	6499	4623	3640
35°	6222	3944	2728
40°	5884	3182	1768
45°	5512	2407	766
50°	5071	1535	286
55°	4570	675	203
60°	3868	291	135
65°	2929	182	68
70°	1782	85	28
75°	372	37	37
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5512 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	7.1
10°-20°	255.9	18.6
20°-30°	328.5	23.9
30°-40°	309.2	22.5
40°-50°	216.2	15.7
50°-60°	115.5	8.4
60°-70°	46.1	3.3
70°-80°	6.0	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°	682.5	49.6
0°-40°	991.8	72.1
0°-60°	1323.5	96.2
0°-90°	1375.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1375.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1065	1065	1065	1065	1065	
5°	1059	1056	1040	1042	1040	100
15°	1006	973	900	858	844	283
25°	893	815	694	618	587	410
35°	740	622	469	362	324	462
45°	566	424	247	119	79	437
55°	381	233	56	20	17	337
65°	180	72	11	6	4	179
75°	14	4	1	1	1	27
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°	1064.7	1064.7	1064.7	1064.7	1064.7
2.5°	1063.3	1064.7	1054.9	1063.3	1064.7
5°	1059.1	1056.3	1039.5	1042.3	1039.5
7.5°	1050.7	1043.7	1015.6	1005.7	1000.1
10°	1040.9	1025.4	983.3	962.2	952.4
12.5°	1025.4	1002.9	943.9	911.6	897.6
15°	1005.7	973.4	900.4	858.3	844.2
17.5°	981.9	939.7	855.4	803.5	782.4
20°	955.2	899.0	803.5	741.7	715.0
22.5°	924.3	859.7	750.1	681.3	654.6
25°	893.4	814.7	693.9	618.1	587.2
27.5°	855.4	768.4	637.7	556.3	522.5
30°	817.5	722.0	581.5	493.0	457.9
32.5°	779.6	672.8	525.3	427.0	391.9
35°	740.3	622.3	469.2	362.4	324.5
37.5°	698.1	571.7	408.8	300.6	261.3
40°	654.6	522.5	354.0	240.2	196.7
42.5°	612.4	473.4	299.2	181.2	133.4
45°	566.1	424.2	247.2	119.4	78.7
47.5°	522.5	376.5	193.8	68.8	40.7
50°	473.4	327.3	143.3	36.5	26.7
52.5°	427.0	279.5	95.5	23.9	21.1
55°	380.7	233.2	56.2	19.7	16.9
57.5°	327.3	188.2	30.9	15.5	12.6
60°	280.9	147.5	21.1	11.2	9.8
62.5°	227.6	108.2	15.5	8.4	7.0
65°	179.8	71.6	11.2	5.6	4.2
67.5°	133.4	42.1	7.0	2.8	2.8
70°	88.5	22.5	4.2	1.4	1.4
72.5°	46.4	9.8	2.8	1.4	1.4
75°	14.0	4.2	1.4	1.4	1.4
77.5°	0.0	1.4	0.0	0.0	1.4
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	15.86	17.13	16.23	17.44	17.76	0.00	0.00	0.00	0.00	0.00
	3H	16.45	17.56	16.83	17.89	18.26	0.00	0.00	0.00	0.00	0.00
	4H	16.41	17.44	16.82	17.80	18.18	0.00	0.00	0.00	0.00	0.00
	6H	16.33	17.27	16.74	17.64	18.04	0.00	0.00	0.00	0.00	0.00
	8H	16.28	17.17	16.71	17.56	17.97	0.00	0.00	0.00	0.00	0.00
	12H	16.23	17.09	16.67	17.47	17.90	0.00	0.00	0.00	0.00	0.00
4H	2H	15.64	16.67	16.04	17.02	17.41	0.00	0.00	0.00	0.00	0.00
	3H	16.23	17.06	16.64	17.47	17.87	0.00	0.00	0.00	0.00	0.00
	4H	16.18	16.92	16.61	17.34	17.79	0.00	0.00	0.00	0.00	0.00
	6H	16.09	16.73	16.56	17.18	17.64	0.00	0.00	0.00	0.00	0.00
	8H	16.03	16.63	16.50	17.07	17.55	0.00	0.00	0.00	0.00	0.00
	12H	15.98	16.50	16.47	16.99	17.46	0.00	0.00	0.00	0.00	0.00
8H	4H	16.03	16.63	16.50	17.07	17.55	0.00	0.00	0.00	0.00	0.00
	6H	15.92	16.41	16.43	16.90	17.39	0.00	0.00	0.00	0.00	0.00
	8H	15.86	16.29	16.38	16.81	17.30	0.00	0.00	0.00	0.00	0.00
	12H	15.81	16.19	16.33	16.69	17.26	0.00	0.00	0.00	0.00	0.00
12H	4H	15.98	16.50	16.47	16.99	17.46	0.00	0.00	0.00	0.00	0.00
	6H	15.86	16.29	16.38	16.81	17.30	0.00	0.00	0.00	0.00	0.00
	8H	15.81	16.19	16.33	16.69	17.26	0.00	0.00	0.00	0.00	0.00