

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: P1062091

Luminaire Tested: S125RDR-H610D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062091
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-H610D835-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

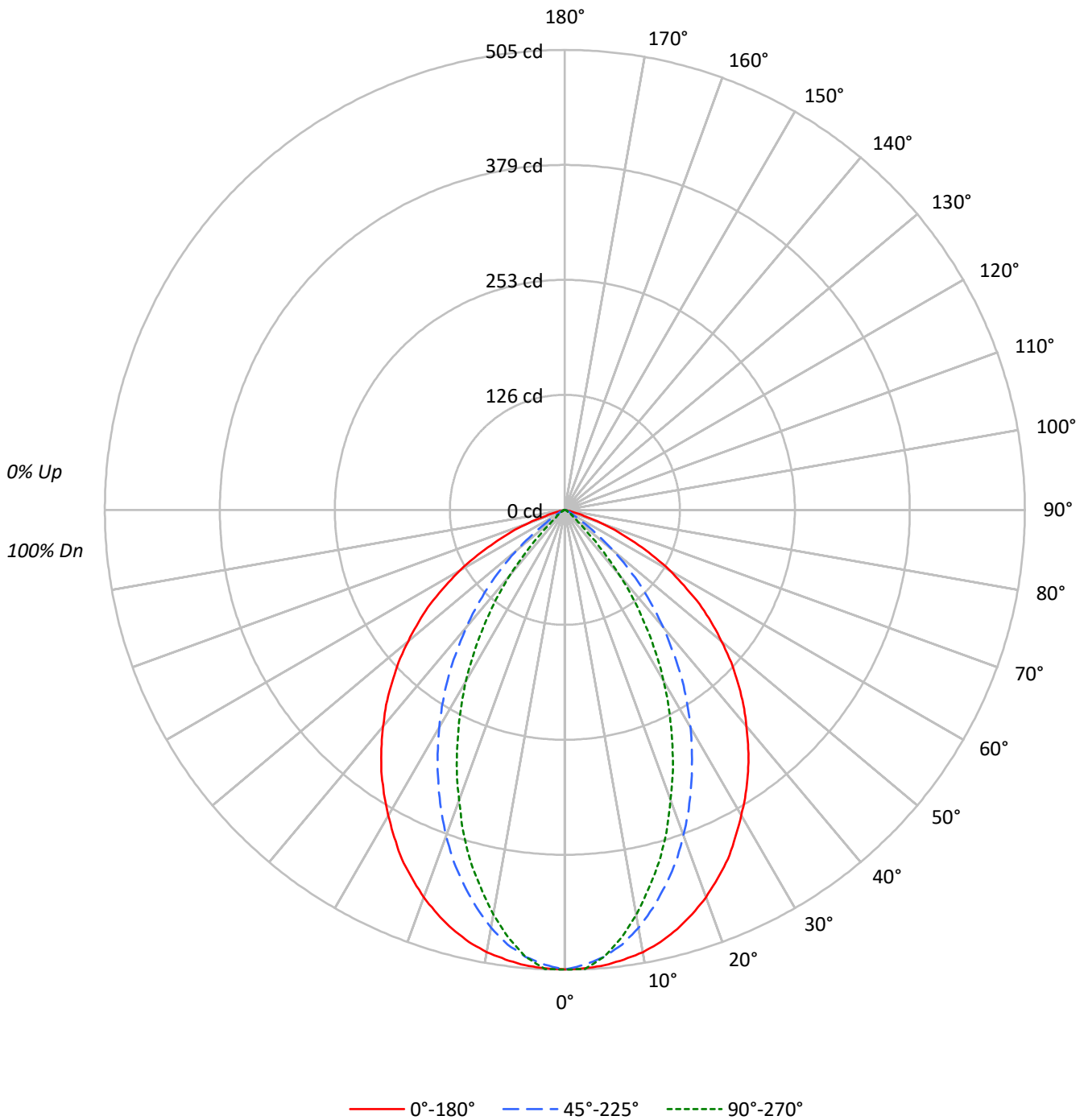
Lumens per Lamp: N/A
Luminaire Lumens: 652.0 lumens
Efficiency: N/A
Efficacy: 37.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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°	3474	3474	3474
5°	3470	3405	3405
10°	3449	3258	3156
15°	3398	3042	2852
20°	3317	2790	2483
25°	3217	2499	2114
30°	3081	2191	1725
35°	2949	1869	1293
40°	2788	1508	838
45°	2612	1141	363
50°	2404	727	135
55°	2166	319	96
60°	1834	138	65
65°	1388	86	33
70°	843	40	14
75°	178	19	19
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2612 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.5	7.1
10°-20°	121.3	18.6
20°-30°	155.7	23.9
30°-40°	146.6	22.5
40°-50°	102.5	15.7
50°-60°	54.7	8.4
60°-70°	21.8	3.3
70°-80°	2.8	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°	323.5	49.6
0°-40°	470.1	72.1
0°-60°	627.3	96.2
0°-90°	652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	652.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	505	505	505	505	505	
5°	502	501	493	494	493	48
15°	477	461	427	407	400	134
25°	423	386	329	293	278	194
35°	351	295	222	172	154	219
45°	268	201	117	57	37	207
55°	180	110	27	9	8	160
65°	85	34	5	3	2	85
75°	7	2	1	1	1	13
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	504.6	504.6	504.6	504.6	504.6
2.5°	504.0	504.6	500.0	504.0	504.6
5°	502.0	500.6	492.7	494.0	492.7
7.5°	498.0	494.7	481.3	476.7	474.0
10°	493.3	486.0	466.0	456.0	451.4
12.5°	486.0	475.4	447.4	432.1	425.4
15°	476.7	461.4	426.8	406.8	400.1
17.5°	465.4	445.4	405.4	380.8	370.8
20°	452.7	426.1	380.8	351.5	338.9
22.5°	438.1	407.4	355.5	322.9	310.2
25°	423.4	386.1	328.9	292.9	278.3
27.5°	405.4	364.2	302.3	263.6	247.7
30°	387.5	342.2	275.6	233.7	217.0
32.5°	369.5	318.9	249.0	202.4	185.7
35°	350.9	294.9	222.4	171.8	153.8
37.5°	330.9	271.0	193.7	142.5	123.8
40°	310.2	247.7	167.8	113.8	93.2
42.5°	290.3	224.4	141.8	85.9	63.2
45°	268.3	201.1	117.2	56.6	37.3
47.5°	247.7	178.4	91.9	32.6	19.3
50°	224.4	155.1	67.9	17.3	12.6
52.5°	202.4	132.5	45.3	11.3	10.0
55°	180.4	110.5	26.6	9.3	8.0
57.5°	155.1	89.2	14.6	7.3	6.0
60°	133.2	69.9	10.0	5.3	4.7
62.5°	107.9	51.3	7.3	4.0	3.3
65°	85.2	34.0	5.3	2.7	2.0
67.5°	63.2	20.0	3.3	1.3	1.3
70°	41.9	10.7	2.0	0.7	0.7
72.5°	22.0	4.7	1.3	0.7	0.7
75°	6.7	2.0	0.7	0.7	0.7
77.5°	0.0	0.7	0.0	0.0	0.7
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	13.27	14.53	13.64	14.85	15.16	0.00	0.00	0.00	0.00	0.00
	3H	13.85	14.97	14.23	15.30	15.66	0.00	0.00	0.00	0.00	0.00
	4H	13.82	14.85	14.22	15.20	15.59	0.00	0.00	0.00	0.00	0.00
	6H	13.73	14.68	14.15	15.05	15.44	0.00	0.00	0.00	0.00	0.00
	8H	13.69	14.58	14.12	14.97	15.38	0.00	0.00	0.00	0.00	0.00
	12H	13.64	14.49	14.07	14.88	15.31	0.00	0.00	0.00	0.00	0.00
4H	2H	13.04	14.08	13.45	14.43	14.81	0.00	0.00	0.00	0.00	0.00
	3H	13.64	14.47	14.05	14.88	15.28	0.00	0.00	0.00	0.00	0.00
	4H	13.58	14.33	14.02	14.75	15.19	0.00	0.00	0.00	0.00	0.00
	6H	13.50	14.14	13.96	14.58	15.05	0.00	0.00	0.00	0.00	0.00
	8H	13.44	14.03	13.91	14.48	14.95	0.00	0.00	0.00	0.00	0.00
	12H	13.39	13.91	13.87	14.39	14.87	0.00	0.00	0.00	0.00	0.00
8H	4H	13.44	14.03	13.91	14.48	14.95	0.00	0.00	0.00	0.00	0.00
	6H	13.33	13.81	13.84	14.31	14.79	0.00	0.00	0.00	0.00	0.00
	8H	13.26	13.70	13.79	14.21	14.71	0.00	0.00	0.00	0.00	0.00
	12H	13.22	13.60	13.73	14.09	14.67	0.00	0.00	0.00	0.00	0.00
12H	4H	13.39	13.91	13.87	14.39	14.87	0.00	0.00	0.00	0.00	0.00
	6H	13.26	13.70	13.79	14.21	14.71	0.00	0.00	0.00	0.00	0.00
	8H	13.22	13.60	13.73	14.09	14.67	0.00	0.00	0.00	0.00	0.00