

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: P1061860

Luminaire Tested: S125RDR-H1090D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061860
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

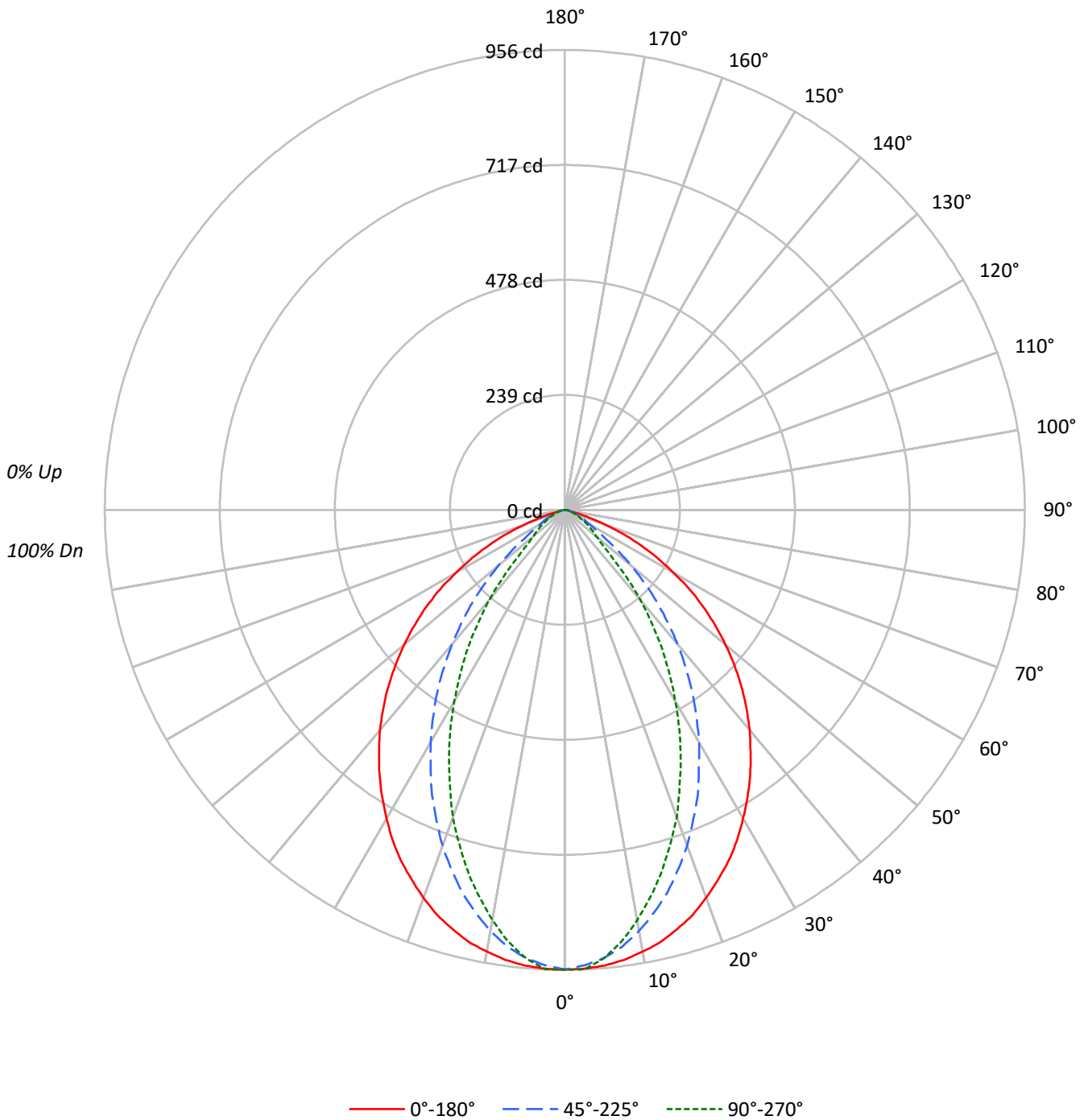
Lumens per Lamp: N/A
Luminaire Lumens: 1382.2 lumens
Efficiency: N/A
Efficacy: 44.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6580	6580	6580
5°	6572	6463	6463
10°	6520	6215	6054
15°	6432	5869	5549
20°	6291	5446	4983
25°	6116	4963	4327
30°	5890	4432	3649
35°	5645	3879	2960
40°	5370	3274	2194
45°	5049	2625	1324
50°	4670	1925	910
55°	4213	1181	757
60°	3579	803	602
65°	2830	613	474
70°	1784	441	391
75°	583	322	322
80°	194	242	289
85°	95	190	190

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5049 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.4	6.4
10°-20°	233.4	16.9
20°-30°	307.0	22.2
30°-40°	301.7	21.8
40°-50°	228.2	16.5
50°-60°	138.4	10.0
60°-70°	65.3	4.7
70°-80°	17.1	1.2
80°-90°	2.6	0.2
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°	628.9	45.5
0°-40°	930.6	67.3
0°-60°	1297.2	93.9
0°-90°	1382.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1382.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	956	956	956	956	956	
5°	951	948	935	936	935	90
15°	902	878	823	792	778	254
25°	805	744	653	593	570	370
35°	672	582	462	380	352	419
45°	518	408	270	171	136	399
55°	351	240	98	67	63	312
65°	174	89	38	32	29	171
75°	22	15	12	12	12	34
85°	1	1	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	955.7	955.7	955.7	955.7	955.7
2.5°	954.5	954.5	947.2	955.7	955.7
5°	950.9	948.4	935.1	936.3	935.1
7.5°	943.6	938.7	915.6	909.6	904.7
10°	932.6	922.9	888.9	874.4	865.9
12.5°	920.5	903.5	857.4	836.7	823.4
15°	902.3	878.0	823.4	791.8	778.4
17.5°	882.9	847.6	783.3	745.6	728.6
20°	858.6	817.3	743.2	697.1	680.1
22.5°	831.9	783.3	697.1	646.1	623.0
25°	805.1	744.4	653.3	592.6	569.5
27.5°	774.8	705.6	603.5	540.4	514.9
30°	740.8	666.7	557.4	491.8	459.0
32.5°	706.8	626.6	508.8	437.2	404.4
35°	671.6	581.7	461.5	380.1	352.2
37.5°	633.9	539.2	412.9	327.9	295.1
40°	597.5	496.7	364.3	274.5	244.1
42.5°	558.6	454.2	315.7	222.2	188.2
45°	518.5	408.0	269.6	171.2	136.0
47.5°	477.3	366.7	223.4	126.3	102.0
50°	436.0	323.0	179.7	93.5	85.0
52.5°	393.5	280.5	136.0	77.7	74.1
55°	351.0	240.4	98.4	66.8	63.1
57.5°	307.2	196.7	74.1	57.1	53.4
60°	259.9	157.9	58.3	47.4	43.7
62.5°	216.2	123.9	47.4	38.9	36.4
65°	173.7	88.6	37.6	31.6	29.1
67.5°	129.9	59.5	29.1	24.3	24.3
70°	88.6	38.9	21.9	19.4	19.4
72.5°	53.4	23.1	15.8	15.8	15.8
75°	21.9	14.6	12.1	12.1	12.1
77.5°	7.3	8.5	8.5	9.7	9.7
80°	4.9	4.9	6.1	7.3	7.3
82.5°	2.4	3.6	3.6	4.9	4.9
85°	1.2	1.2	2.4	2.4	2.4
87.5°	0.0	0.0	0.0	1.2	1.2
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	15.87	17.21	16.24	17.52	17.83	6.53	7.86	6.90	8.18	8.49
	3H	16.58	17.76	16.96	18.09	18.45	7.31	8.49	7.69	8.82	9.18
	4H	16.60	17.69	17.00	18.04	18.43	7.56	8.66	7.96	9.01	9.39
	6H	16.53	17.53	16.94	17.90	18.30	7.74	8.74	8.15	9.11	9.51
	8H	16.49	17.44	16.92	17.83	18.23	7.78	8.74	8.21	9.13	9.53
	12H	16.45	17.35	16.88	17.74	18.17	7.79	8.70	8.22	9.08	9.51
4H	2H	15.71	16.80	16.11	17.15	17.53	7.02	8.11	7.42	8.46	8.85
	3H	16.45	17.34	16.86	17.75	18.15	7.93	8.82	8.34	9.22	9.62
	4H	16.47	17.26	16.90	17.68	18.13	8.24	9.03	8.67	9.45	9.89
	6H	16.41	17.09	16.87	17.54	18.01	8.50	9.18	8.96	9.63	10.09
	8H	16.36	17.00	16.83	17.44	17.91	8.56	9.20	9.03	9.65	10.12
	12H	16.31	16.88	16.80	17.36	17.83	8.59	9.15	9.08	9.63	10.11
8H	4H	16.35	16.99	16.82	17.44	17.91	8.35	8.99	8.82	9.43	9.91
	6H	16.28	16.80	16.78	17.29	17.77	8.67	9.19	9.17	9.68	10.17
	8H	16.22	16.69	16.75	17.20	17.70	8.78	9.24	9.30	9.76	10.25
	12H	16.18	16.59	16.70	17.09	17.66	8.84	9.25	9.35	9.74	10.31
12H	4H	16.31	16.87	16.79	17.35	17.83	8.32	8.88	8.81	9.37	9.84
	6H	16.22	16.69	16.74	17.20	17.69	8.64	9.11	9.16	9.62	10.11
	8H	16.18	16.60	16.70	17.09	17.66	8.78	9.19	9.30	9.69	10.26