

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: P1061881

Luminaire Tested: S125RDR-H1090D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061881
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: S125RDR-H1090D927-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

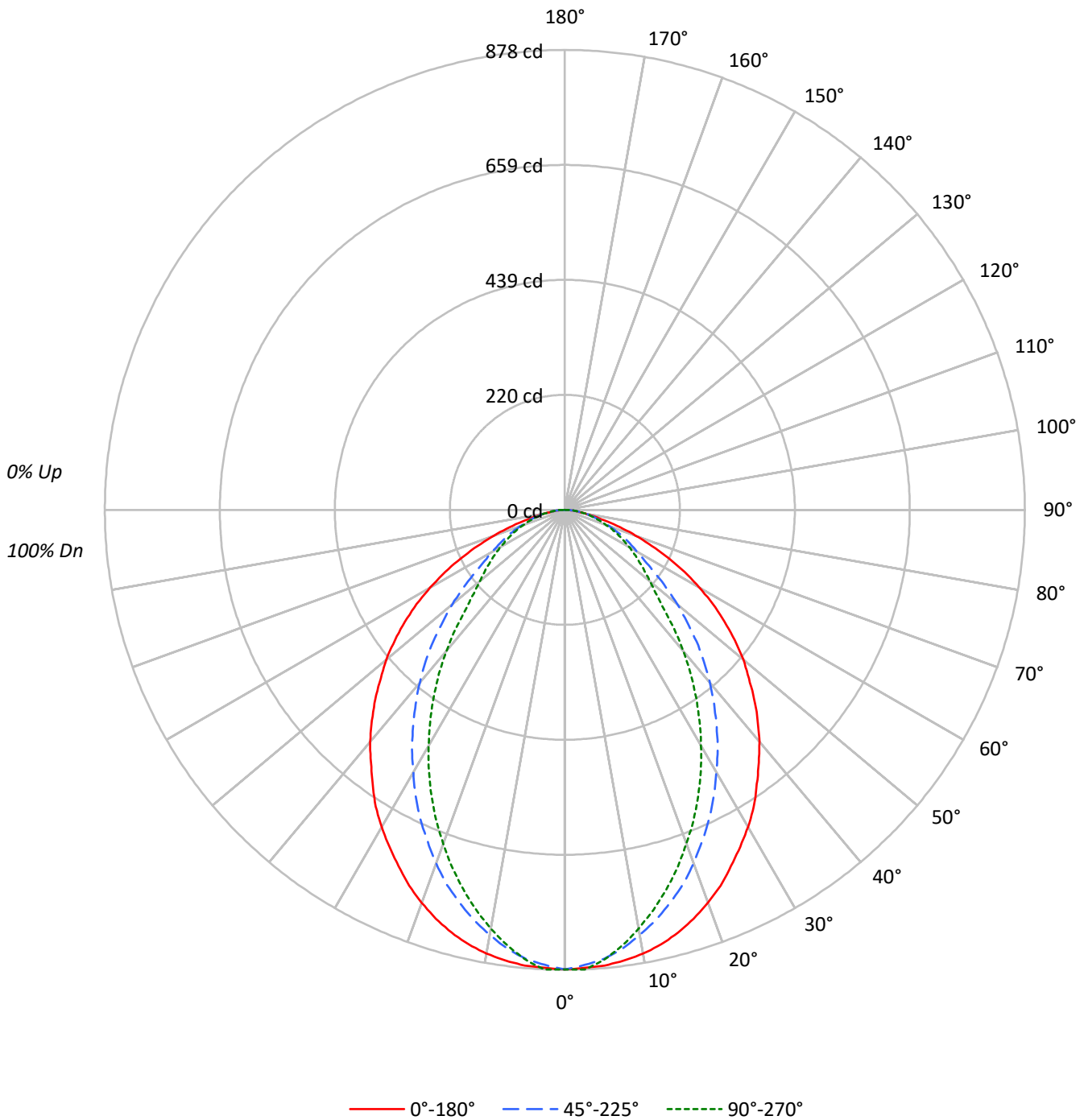
Lumens per Lamp: N/A
Luminaire Lumens: 1662.0 lumens
Efficiency: N/A
Efficacy: 53.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65			65	
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57			57	
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			50	
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45			45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40			40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36			36	
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33			33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30			30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6040	6040	6040
5°	6037	5945	5958
10°	6014	5761	5674
15°	5955	5534	5344
20°	5849	5262	4969
25°	5702	4950	4573
30°	5559	4597	4135
35°	5373	4244	3667
40°	5197	3870	3159
45°	4981	3460	2588
50°	4766	3000	2265
55°	4472	2504	2092
60°	4080	2191	1954
65°	3570	2002	1817
70°	2895	1802	1687
75°	2078	1647	1572
80°	1435	1475	1475
85°	1051	1280	1351

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4981 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	4.9
10°-20°	220.6	13.3
20°-30°	305.0	18.3
30°-40°	324.8	19.5
40°-50°	285.3	17.2
50°-60°	216.4	13.0
60°-70°	140.5	8.5
70°-80°	69.6	4.2
80°-90°	18.2	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°	607.2	36.5
0°-40°	932.0	56.1
0°-60°	1433.7	86.3
0°-90°	1662.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1662.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	874	872	860	863	862	83
15°	835	816	776	758	750	235
25°	751	710	652	618	602	346
35°	639	580	505	459	436	400
45°	512	440	355	292	266	394
55°	372	299	209	180	174	332
65°	219	163	123	113	112	217
75°	78	69	62	60	59	87
85°	13	15	16	16	17	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	877.3	877.3	877.3	877.3	877.3
2.5°	875.4	877.3	869.7	876.4	878.3
5°	873.5	871.6	860.2	863.0	862.1
7.5°	867.8	864.0	844.9	843.0	839.2
10°	860.2	850.7	824.0	817.3	811.6
12.5°	849.7	834.5	802.1	788.7	782.1
15°	835.4	816.4	776.4	758.3	749.7
17.5°	818.3	791.6	749.7	724.9	715.4
20°	798.3	766.8	718.2	689.7	678.2
22.5°	776.4	739.2	684.9	654.4	642.0
25°	750.6	709.7	651.6	618.2	602.0
27.5°	724.9	679.2	616.3	579.2	562.0
30°	699.2	646.8	578.2	538.2	520.1
32.5°	671.6	613.5	543.0	499.2	478.2
35°	639.2	580.1	504.9	459.1	436.3
37.5°	607.7	544.9	467.7	416.3	394.4
40°	578.2	511.5	430.6	374.4	351.5
42.5°	544.9	476.3	393.4	334.4	308.6
45°	511.5	440.1	355.3	291.5	265.8
47.5°	476.3	405.8	315.3	252.4	235.3
50°	444.9	370.6	280.1	222.9	211.5
52.5°	408.7	336.3	243.9	200.0	192.4
55°	372.5	299.1	208.6	180.0	174.3
57.5°	335.3	265.8	181.0	162.9	157.2
60°	296.3	231.5	159.1	144.8	141.9
62.5°	257.2	196.2	140.0	129.6	125.7
65°	219.1	162.9	122.9	113.4	111.5
67.5°	180.0	132.4	105.7	99.1	98.1
70°	143.8	107.6	89.5	85.7	83.8
72.5°	110.5	85.7	75.3	72.4	71.4
75°	78.1	68.6	61.9	60.0	59.1
77.5°	52.4	52.4	49.5	47.6	48.6
80°	36.2	38.1	37.2	37.2	37.2
82.5°	23.8	25.7	26.7	26.7	26.7
85°	13.3	15.2	16.2	16.2	17.1
87.5°	4.8	5.7	6.7	7.6	7.6
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	16.80	18.29	17.17	18.61	18.92	13.04	14.54	13.41	14.85	15.16
	3H	18.11	19.45	18.49	19.78	20.14	14.63	15.96	15.00	16.29	16.65
	4H	18.48	19.74	18.88	20.08	20.46	15.23	16.48	15.63	16.83	17.21
	6H	18.66	19.81	19.07	20.18	20.57	15.70	16.86	16.11	17.22	17.62
	8H	18.69	19.80	19.12	20.19	20.59	15.86	16.96	16.29	17.35	17.75
	12H	18.71	19.76	19.14	20.14	20.57	15.97	17.03	16.40	17.41	17.84
4H	2H	16.91	18.17	17.31	18.52	18.90	13.71	14.96	14.11	15.31	15.69
	3H	18.40	19.44	18.81	19.84	20.24	15.49	16.52	15.90	16.92	17.33
	4H	18.88	19.81	19.31	20.23	20.66	16.20	17.14	16.64	17.55	17.99
	6H	19.16	19.97	19.62	20.42	20.88	16.79	17.60	17.25	18.05	18.51
	8H	19.23	19.99	19.70	20.43	20.90	17.00	17.76	17.46	18.20	18.67
	12H	19.27	19.95	19.75	20.43	20.90	17.15	17.83	17.64	18.31	18.78
8H	4H	18.96	19.72	19.42	20.16	20.63	16.51	17.27	16.98	17.72	18.18
	6H	19.32	19.95	19.82	20.44	20.92	17.22	17.85	17.72	18.34	18.82
	8H	19.44	20.00	19.95	20.51	21.00	17.50	18.06	18.02	18.57	19.06
	12H	19.53	20.02	20.04	20.51	21.08	17.73	18.23	18.24	18.72	19.29
12H	4H	18.95	19.63	19.44	20.11	20.58	16.54	17.22	17.02	17.70	18.17
	6H	19.33	19.89	19.84	20.40	20.89	17.27	17.84	17.79	18.35	18.83
	8H	19.49	19.98	20.00	20.47	21.04	17.61	18.11	18.12	18.60	19.16