

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1057868

Luminaire Tested: S122RDRP-S1005D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057868
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D950-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

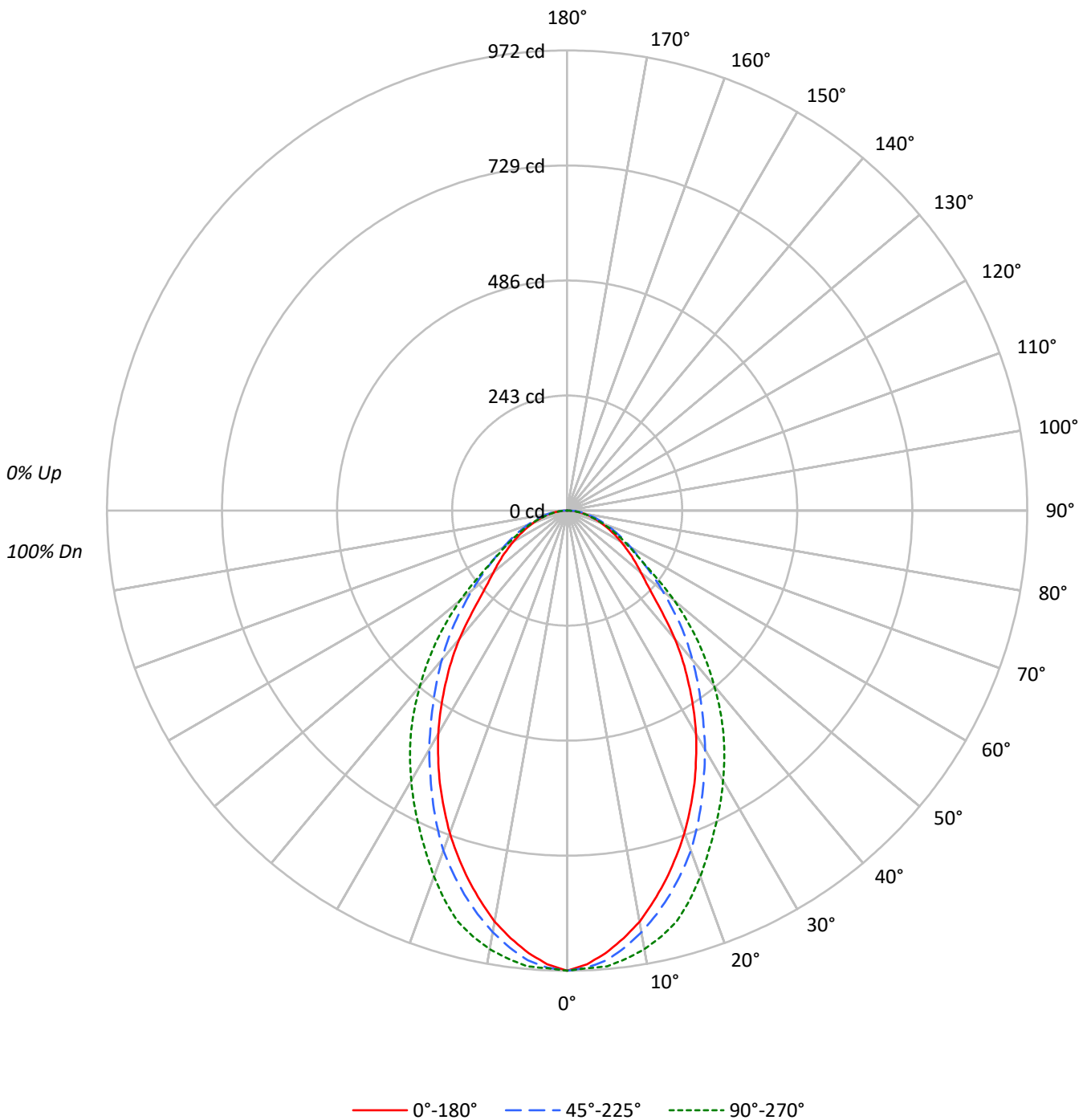
Lumens per Lamp: N/A
Luminaire Lumens: 1582.5 lumens
Efficiency: N/A
Efficacy: 37.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{in}): 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	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	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89					87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78					76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68					66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61					59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49					47				
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44					43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41					39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37					36				
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17932	17932	17932
5°	17375	17662	17897
10°	16517	16940	17628
15°	15413	16032	17138
20°	14237	15012	16147
25°	12951	13698	15048
30°	11600	12411	14035
35°	10103	11090	12964
40°	8527	9922	11654
45°	6772	8760	10196
50°	5830	7530	8463
55°	5308	6444	6489
60°	4842	5728	5517
65°	4436	5174	4864
70°	4111	4796	4338
75°	3821	4527	3821
80°	3602	4346	3443
85°	3578	4488	2985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10196 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	5.7
10°-20°	237.2	15.0
20°-30°	312.1	19.7
30°-40°	313.8	19.8
40°-50°	254.3	16.1
50°-60°	175.2	11.1
60°-70°	114.7	7.2
70°-80°	63.9	4.0
80°-90°	21.6	1.4
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
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0°-30°	638.9	40.4
0°-40°	952.8	60.2
0°-60°	1382.3	87.4
0°-90°	1582.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1582.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	972	972	972	972	972	
5°	938	956	954	958	966	88
15°	807	826	839	870	897	226
25°	636	653	673	702	739	291
35°	448	470	492	536	576	280
45°	260	289	336	365	391	205
55°	165	183	200	204	202	148
65°	102	121	118	113	111	101
75°	54	66	64	56	54	57
85°	17	23	21	18	14	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	971.8	971.8	971.8	971.8	971.8
2.5°	959.1	976.0	966.2	966.2	967.6
5°	938.0	956.3	953.5	957.7	966.2
7.5°	911.2	930.9	930.9	943.6	954.9
10°	881.5	901.3	904.1	923.9	940.8
12.5°	844.9	864.6	873.1	898.5	921.0
15°	806.8	826.5	839.2	870.3	897.1
17.5°	765.9	785.6	802.6	835.0	861.8
20°	725.0	743.3	764.5	792.7	822.3
22.5°	679.8	699.6	719.3	746.1	780.0
25°	636.1	653.0	672.8	702.4	739.1
27.5°	589.6	607.9	626.2	661.5	699.6
30°	544.4	562.8	582.5	619.2	658.7
32.5°	496.5	516.2	536.0	576.9	617.8
35°	448.5	469.7	492.3	536.0	575.5
37.5°	402.0	424.6	451.3	496.5	530.3
40°	354.0	378.0	411.9	451.3	483.8
42.5°	303.3	332.9	373.8	407.6	437.2
45°	259.5	289.1	335.7	365.3	390.7
47.5°	227.1	251.1	296.2	321.6	342.7
50°	203.1	221.4	262.3	280.7	294.8
52.5°	183.4	201.7	229.9	242.6	246.8
55°	165.0	183.4	200.3	204.5	201.7
57.5°	146.7	166.4	176.3	172.1	172.1
60°	131.2	152.3	155.2	149.5	149.5
62.5°	115.7	136.8	136.8	129.8	129.8
65°	101.6	121.3	118.5	112.8	111.4
67.5°	88.9	107.2	103.0	97.3	95.9
70°	76.2	93.1	88.9	81.8	80.4
72.5°	64.9	80.4	74.8	69.1	66.3
75°	53.6	66.3	63.5	56.4	53.6
77.5°	43.7	53.6	50.8	45.1	42.3
80°	33.9	42.3	40.9	35.3	32.4
82.5°	25.4	32.4	31.0	26.8	22.6
85°	16.9	22.6	21.2	18.3	14.1
87.5°	8.5	15.5	14.1	12.7	7.1
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	16.76	18.20	17.12	18.51	18.83	17.12	18.56	17.48	18.87	19.19
	3H	18.30	19.59	18.68	19.92	20.28	18.46	19.75	18.84	20.08	20.45
	4H	18.87	20.08	19.27	20.43	20.81	18.95	20.15	19.35	20.50	20.88
	6H	19.30	20.42	19.72	20.79	21.18	19.30	20.42	19.71	20.78	21.18
	8H	19.46	20.52	19.89	20.91	21.31	19.42	20.48	19.84	20.87	21.27
	12H	19.57	20.59	20.00	20.97	21.40	19.49	20.51	19.92	20.89	21.32
4H	2H	17.34	18.55	17.74	18.90	19.28	17.63	18.84	18.03	19.19	19.57
	3H	19.17	20.17	19.58	20.57	20.97	19.21	20.21	19.62	20.61	21.01
	4H	19.91	20.82	20.35	21.23	21.67	19.81	20.71	20.24	21.13	21.57
	6H	20.50	21.28	20.96	21.73	22.19	20.29	21.07	20.75	21.52	21.98
	8H	20.71	21.44	21.18	21.89	22.36	20.46	21.19	20.92	21.63	22.10
	12H	20.88	21.53	21.36	22.01	22.48	20.58	21.23	21.06	21.71	22.18
8H	4H	20.20	20.93	20.66	21.37	21.84	20.11	20.84	20.58	21.29	21.76
	6H	20.96	21.56	21.45	22.05	22.53	20.73	21.33	21.23	21.83	22.30
	8H	21.28	21.82	21.79	22.33	22.82	20.98	21.52	21.49	22.03	22.52
	12H	21.56	22.04	22.07	22.54	23.10	21.19	21.67	21.70	22.16	22.73
12H	4H	20.22	20.87	20.70	21.35	21.82	20.15	20.80	20.63	21.28	21.75
	6H	21.01	21.56	21.53	22.07	22.56	20.81	21.35	21.32	21.86	22.35
	8H	21.41	21.89	21.92	22.39	22.95	21.12	21.60	21.64	22.10	22.66