

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: P1058031

Luminaire Tested: S122RDRP-S485D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058031
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

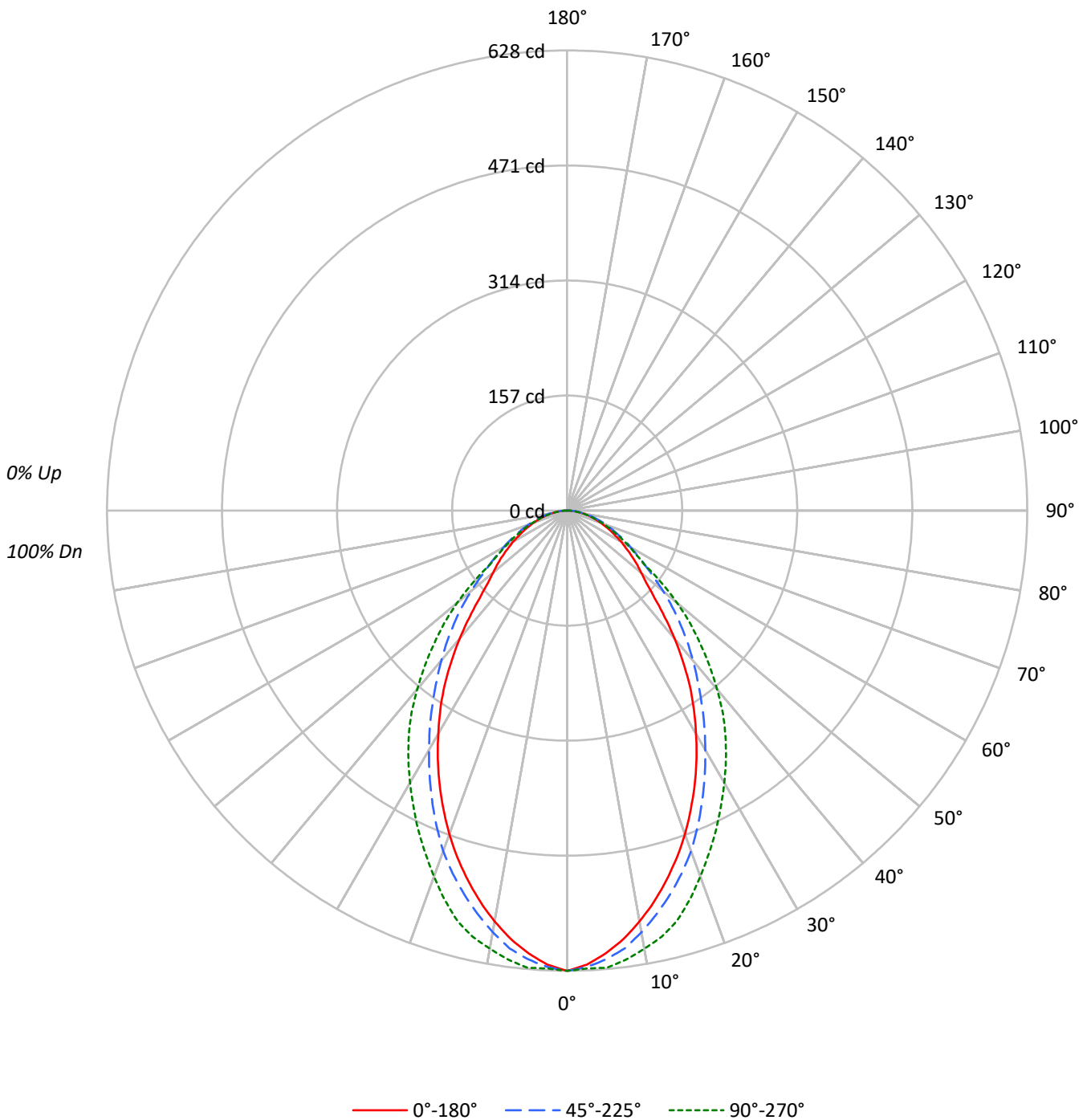
Lumens per Lamp: N/A
Luminaire Lumens: 1024.0 lumens
Efficiency: N/A
Efficacy: 52.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11590	11590	11590
5°	11234	11384	11597
10°	10669	10946	11377
15°	9987	10362	11070
20°	9231	9708	10437
25°	8388	8883	9791
30°	7498	8031	9139
35°	6573	7197	8490
40°	5499	6427	7662
45°	4408	5694	6699
50°	3781	4906	5624
55°	3455	4173	4150
60°	3141	3690	3613
65°	2860	3301	3157
70°	2622	3027	2805
75°	2453	2795	2453
80°	2295	2582	2157
85°	2287	2710	1863

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6699 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	5.7
10°-20°	153.5	15.0
20°-30°	202.5	19.8
30°-40°	203.9	19.9
40°-50°	166.0	16.2
50°-60°	113.1	11.0
60°-70°	73.4	7.2
70°-80°	40.4	3.9
80°-90°	13.2	1.3
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°	414.0	40.4
0°-40°	617.9	60.3
0°-60°	897.0	87.6
0°-90°	1024.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1024.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	606	618	615	620	626	57
15°	523	536	542	565	580	146
25°	412	426	436	456	481	189
35°	292	307	320	347	377	181
45°	169	190	218	237	257	133
55°	107	118	130	130	129	96
65°	66	78	76	72	72	65
75°	34	43	39	35	34	36
85°	11	14	13	10	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	628.1	628.1	628.1	628.1	628.1
2.5°	620.0	630.2	623.4	624.1	625.4
5°	606.5	618.0	614.6	620.0	626.1
7.5°	589.6	601.1	602.5	610.6	618.0
10°	569.4	582.2	584.2	596.4	607.2
12.5°	547.1	561.3	564.0	581.5	595.7
15°	522.8	536.3	542.4	564.6	579.5
17.5°	497.1	509.9	519.4	539.7	556.5
20°	470.1	482.2	494.4	512.6	531.5
22.5°	441.0	454.5	466.0	484.3	505.9
25°	412.0	425.5	436.3	455.9	480.9
27.5°	382.3	395.8	406.6	427.5	454.5
30°	351.9	366.1	376.9	400.5	428.9
32.5°	322.2	336.4	348.5	373.5	403.2
35°	291.8	306.6	319.5	347.2	376.9
37.5°	259.4	276.2	292.5	320.1	349.2
40°	228.3	247.2	266.8	292.5	318.1
42.5°	197.2	218.2	242.5	264.1	287.7
45°	168.9	189.8	218.2	237.1	256.7
47.5°	146.6	164.1	194.5	210.1	227.6
50°	131.7	143.9	170.9	183.0	195.9
52.5°	119.5	129.7	148.6	156.7	163.4
55°	107.4	118.2	129.7	130.4	129.0
57.5°	95.2	107.4	113.5	108.7	111.4
60°	85.1	97.3	100.0	95.2	97.9
62.5°	74.3	87.8	87.8	83.1	84.4
65°	65.5	77.7	75.6	71.6	72.3
67.5°	56.7	68.9	65.5	61.5	61.5
70°	48.6	60.1	56.1	52.0	52.0
72.5°	41.2	50.7	48.0	43.2	42.6
75°	34.4	42.6	39.2	35.1	34.4
77.5°	27.7	34.4	31.7	28.4	27.0
80°	21.6	27.7	24.3	21.6	20.3
82.5°	16.2	20.9	18.2	15.5	14.2
85°	10.8	14.2	12.8	10.1	8.8
87.5°	5.4	9.5	8.1	6.8	5.4
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	15.23	16.67	15.60	16.98	17.30	15.48	16.91	15.84	17.23	17.54
	3H	16.76	18.05	17.14	18.37	18.74	16.84	18.12	17.21	18.45	18.81
	4H	17.32	18.53	17.72	18.88	19.26	17.32	18.52	17.72	18.87	19.25
	6H	17.75	18.86	18.16	19.22	19.62	17.67	18.78	18.08	19.15	19.54
	8H	17.90	18.95	18.33	19.34	19.75	17.77	18.83	18.20	19.22	19.62
	12H	18.01	19.02	18.44	19.40	19.83	17.84	18.85	18.27	19.24	19.67
4H	2H	15.80	17.01	16.20	17.36	17.74	16.00	17.20	16.40	17.55	17.93
	3H	17.61	18.61	18.02	19.01	19.41	17.58	18.57	17.99	18.98	19.38
	4H	18.35	19.25	18.78	19.66	20.10	18.17	19.07	18.60	19.48	19.92
	6H	18.94	19.72	19.39	20.16	20.62	18.64	19.42	19.10	19.86	20.33
	8H	19.15	19.87	19.61	20.32	20.79	18.79	19.52	19.25	19.96	20.43
	12H	19.31	19.96	19.79	20.44	20.91	18.90	19.55	19.38	20.03	20.50
8H	4H	18.61	19.34	19.08	19.79	20.26	18.46	19.19	18.93	19.63	20.10
	6H	19.37	19.97	19.87	20.46	20.94	19.05	19.65	19.55	20.15	20.62
	8H	19.69	20.23	20.21	20.75	21.24	19.27	19.81	19.79	20.32	20.81
	12H	19.98	20.45	20.49	20.95	21.51	19.46	19.93	19.97	20.43	20.99
12H	4H	18.63	19.28	19.11	19.76	20.23	18.49	19.14	18.98	19.62	20.10
	6H	19.41	19.96	19.93	20.47	20.96	19.12	19.66	19.64	20.17	20.66
	8H	19.81	20.29	20.32	20.78	21.35	19.40	19.88	19.92	20.37	20.94