

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: P1058022

Luminaire Tested: S122RDRP-S485D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058022
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-S485D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

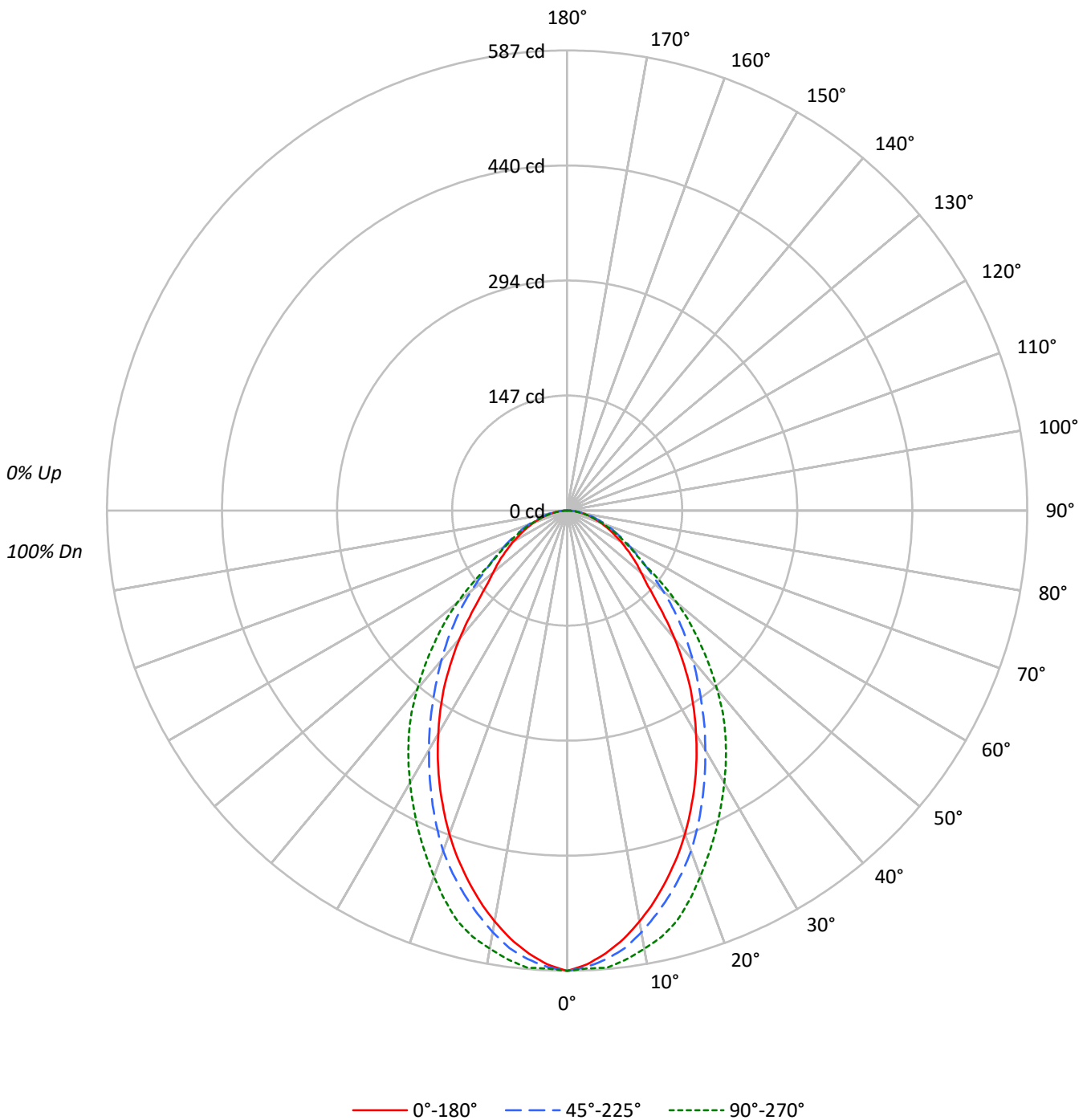
Lumens per Lamp: N/A
Luminaire Lumens: 957.2 lumens
Efficiency: N/A
Efficacy: 48.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1058022

CATALOG NUMBER: S122RDRP-S485D940-X4F0-XX-UDD-WVL-W

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	99	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	40	35	46	39	35	45	39	35	44	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10833	10833	10833
5°	10501	10641	10840
10°	9972	10232	10633
15°	9334	9684	10348
20°	8628	9074	9756
25°	7841	8303	9152
30°	7008	7506	8542
35°	6143	6726	7936
40°	5140	6008	7161
45°	4118	5321	6260
50°	3534	4584	5256
55°	3230	3899	3880
60°	2934	3447	3377
65°	2672	3087	2952
70°	2455	2827	2622
75°	2296	2609	2296
80°	2147	2412	2008
85°	2138	2541	1736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6260 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	5.7
10°-20°	143.5	15.0
20°-30°	189.3	19.8
30°-40°	190.6	19.9
40°-50°	155.1	16.2
50°-60°	105.8	11.0
60°-70°	68.6	7.2
70°-80°	37.8	3.9
80°-90°	12.3	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°	386.9	40.4
0°-40°	577.5	60.3
0°-60°	838.4	87.6
0°-90°	957.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	957.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	567	578	574	580	585	53
15°	489	501	507	528	542	137
25°	385	398	408	426	450	177
35°	273	287	299	324	352	169
45°	158	177	204	222	240	124
55°	100	110	121	122	121	90
65°	61	73	71	67	68	61
75°	32	40	37	33	32	34
85°	10	13	12	10	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	587.1	587.1	587.1	587.1	587.1
2.5°	579.5	589.0	582.7	583.3	584.6
5°	566.9	577.6	574.5	579.5	585.2
7.5°	551.1	561.9	563.1	570.7	577.6
10°	532.2	544.2	546.1	557.4	567.5
12.5°	511.4	524.6	527.1	543.6	556.8
15°	488.6	501.3	506.9	527.8	541.7
17.5°	464.6	476.6	485.5	504.4	520.2
20°	439.4	450.8	462.1	479.2	496.8
22.5°	412.2	424.9	435.6	452.6	472.9
25°	385.1	397.7	407.8	426.1	449.5
27.5°	357.3	369.9	380.0	399.6	424.9
30°	328.9	342.2	352.3	374.4	400.9
32.5°	301.1	314.4	325.8	349.1	376.9
35°	272.7	286.6	298.6	324.5	352.3
37.5°	242.4	258.2	273.4	299.2	326.4
40°	213.4	231.1	249.4	273.4	297.3
42.5°	184.3	203.9	226.6	246.8	268.9
45°	157.8	177.4	203.9	221.6	239.9
47.5°	137.0	153.4	181.8	196.3	212.8
50°	123.1	134.5	159.7	171.1	183.1
52.5°	111.7	121.2	138.9	146.5	152.8
55°	100.4	110.5	121.2	121.8	120.6
57.5°	89.0	100.4	106.1	101.6	104.2
60°	79.5	90.9	93.4	89.0	91.5
62.5°	69.4	82.1	82.1	77.7	78.9
65°	61.2	72.6	70.7	66.9	67.6
67.5°	53.0	64.4	61.2	57.4	57.4
70°	45.5	56.2	52.4	48.6	48.6
72.5°	38.5	47.3	44.8	40.4	39.8
75°	32.2	39.8	36.6	32.8	32.2
77.5°	25.9	32.2	29.7	26.5	25.3
80°	20.2	25.9	22.7	20.2	18.9
82.5°	15.2	19.6	17.0	14.5	13.3
85°	10.1	13.3	12.0	9.5	8.2
87.5°	5.1	8.8	7.6	6.3	5.1
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	15.00	16.44	15.36	16.75	17.06	15.24	16.68	15.61	16.99	17.31
	3H	16.53	17.81	16.90	18.14	18.50	16.60	17.89	16.98	18.22	18.58
	4H	17.09	18.29	17.49	18.64	19.02	17.08	18.29	17.48	18.64	19.02
	6H	17.51	18.62	17.93	18.99	19.38	17.43	18.54	17.84	18.91	19.30
	8H	17.67	18.72	18.09	19.11	19.52	17.54	18.60	17.97	18.99	19.39
	12H	17.78	18.79	18.21	19.17	19.60	17.61	18.62	18.04	19.00	19.43
4H	2H	15.57	16.77	15.97	17.12	17.50	15.77	16.97	16.17	17.32	17.70
	3H	17.37	18.37	17.78	18.77	19.17	17.34	18.34	17.75	18.74	19.14
	4H	18.12	19.01	18.55	19.43	19.87	17.93	18.83	18.37	19.25	19.69
	6H	18.70	19.48	19.16	19.93	20.39	18.40	19.18	18.86	19.63	20.09
	8H	18.91	19.64	19.38	20.09	20.56	18.55	19.28	19.02	19.73	20.20
	12H	19.08	19.73	19.56	20.21	20.68	18.66	19.31	19.15	19.79	20.26
8H	4H	18.38	19.11	18.85	19.56	20.02	18.23	18.95	18.69	19.40	19.87
	6H	19.14	19.74	19.64	20.23	20.71	18.82	19.42	19.31	19.91	20.39
	8H	19.46	20.00	19.98	20.51	21.00	19.04	19.58	19.55	20.09	20.58
	12H	19.75	20.22	20.26	20.72	21.28	19.22	19.70	19.73	20.19	20.76
12H	4H	18.39	19.04	18.88	19.52	20.00	18.26	18.91	18.74	19.39	19.86
	6H	19.18	19.72	19.70	20.23	20.72	18.88	19.42	19.40	19.94	20.43
	8H	19.58	20.06	20.09	20.55	21.12	19.17	19.65	19.68	20.14	20.71