

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: P1058004

Luminaire Tested: S122RDRP-S485D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058004
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-S485D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

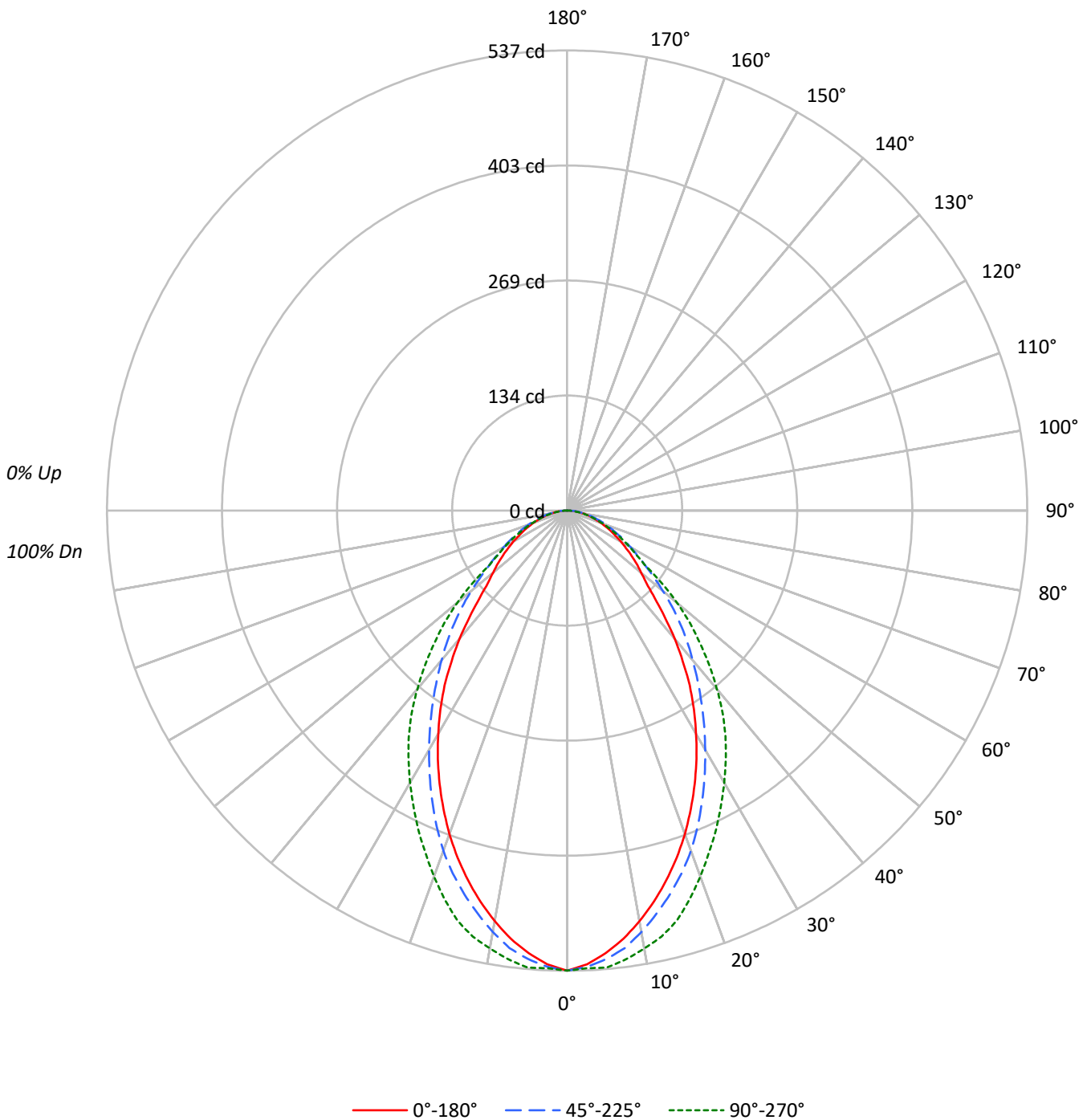
Lumens per Lamp: N/A
Luminaire Lumens: 875.1 lumens
Efficiency: N/A
Efficacy: 44.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	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	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	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	46	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	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9905	9905	9905
5°	9600	9730	9912
10°	9117	9355	9723
15°	8535	8854	9460
20°	7888	8297	8921
25°	7169	7592	8368
30°	6407	6863	7809
35°	5618	6150	7256
40°	4700	5492	6550
45°	3766	4864	5723
50°	3232	4191	4806
55°	2953	3565	3545
60°	2683	3152	3089
65°	2445	2821	2698
70°	2244	2584	2395
75°	2096	2388	2096
80°	1966	2210	1838
85°	1948	2329	1588

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5723 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	5.7
10°-20°	131.2	15.0
20°-30°	173.0	19.8
30°-40°	174.2	19.9
40°-50°	141.8	16.2
50°-60°	96.7	11.0
60°-70°	62.8	7.2
70°-80°	34.6	3.9
80°-90°	11.3	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°	353.8	40.4
0°-40°	528.0	60.3
0°-60°	766.5	87.6
0°-90°	875.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	875.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	537	537	537	537	537	
5°	518	528	525	530	535	48
15°	447	458	464	482	495	125
25°	352	364	373	390	411	161
35°	249	262	273	297	322	155
45°	144	162	186	203	219	114
55°	92	101	111	111	110	82
65°	56	66	65	61	62	56
75°	29	36	34	30	29	31
85°	9	12	11	9	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	536.8	536.8	536.8	536.8	536.8
2.5°	529.9	538.5	532.8	533.3	534.5
5°	518.3	528.1	525.3	529.9	535.1
7.5°	503.9	513.7	514.9	521.8	528.1
10°	486.6	497.6	499.3	509.7	518.9
12.5°	467.5	479.7	482.0	497.0	509.1
15°	446.8	458.3	463.5	482.5	495.2
17.5°	424.8	435.8	443.9	461.2	475.6
20°	401.7	412.1	422.5	438.1	454.3
22.5°	376.9	388.5	398.3	413.9	432.3
25°	352.1	363.6	372.9	389.6	411.0
27.5°	326.7	338.2	347.5	365.4	388.5
30°	300.7	312.8	322.1	342.3	366.5
32.5°	275.3	287.5	297.8	319.2	344.6
35°	249.4	262.1	273.0	296.7	322.1
37.5°	221.6	236.1	249.9	273.6	298.4
40°	195.1	211.3	228.0	249.9	271.9
42.5°	168.5	186.4	207.2	225.7	245.9
45°	144.3	162.2	186.4	202.6	219.3
47.5°	125.3	140.3	166.2	179.5	194.5
50°	112.6	122.9	146.0	156.4	167.4
52.5°	102.2	110.8	127.0	133.9	139.7
55°	91.8	101.0	110.8	111.4	110.2
57.5°	81.4	91.8	97.0	92.9	95.2
60°	72.7	83.1	85.4	81.4	83.7
62.5°	63.5	75.0	75.0	71.0	72.2
65°	56.0	66.4	64.6	61.2	61.8
67.5°	48.5	58.9	56.0	52.5	52.5
70°	41.6	51.4	47.9	44.4	44.4
72.5°	35.2	43.3	41.0	36.9	36.4
75°	29.4	36.4	33.5	30.0	29.4
77.5°	23.7	29.4	27.1	24.2	23.1
80°	18.5	23.7	20.8	18.5	17.3
82.5°	13.9	17.9	15.6	13.3	12.1
85°	9.2	12.1	11.0	8.7	7.5
87.5°	4.6	8.1	6.9	5.8	4.6
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	14.69	16.13	15.05	16.44	16.75	14.93	16.37	15.30	16.68	17.00
	3H	16.22	17.50	16.59	17.83	18.19	16.29	17.58	16.67	17.90	18.27
	4H	16.78	17.98	17.18	18.33	18.71	16.77	17.97	17.17	18.32	18.70
	6H	17.20	18.31	17.62	18.68	19.07	17.12	18.23	17.53	18.60	18.99
	8H	17.36	18.41	17.78	18.80	19.21	17.23	18.28	17.65	18.67	19.08
	12H	17.47	18.48	17.90	18.86	19.29	17.29	18.31	17.73	18.69	19.12
4H	2H	15.26	16.46	15.66	16.81	17.19	15.45	16.66	15.85	17.01	17.39
	3H	17.06	18.06	17.47	18.46	18.86	17.03	18.03	17.44	18.43	18.83
	4H	17.81	18.70	18.24	19.12	19.56	17.62	18.52	18.06	18.94	19.38
	6H	18.39	19.17	18.85	19.62	20.08	18.09	18.87	18.55	19.31	19.78
	8H	18.60	19.33	19.07	19.78	20.25	18.24	18.97	18.71	19.42	19.88
	12H	18.77	19.42	19.25	19.90	20.37	18.35	19.00	18.83	19.48	19.95
8H	4H	18.07	18.80	18.54	19.24	19.71	17.91	18.64	18.38	19.09	19.56
	6H	18.83	19.43	19.32	19.92	20.40	18.50	19.11	19.00	19.60	20.08
	8H	19.15	19.69	19.67	20.20	20.69	18.73	19.27	19.24	19.78	20.27
	12H	19.43	19.91	19.94	20.40	20.97	18.91	19.39	19.42	19.88	20.45
12H	4H	18.08	18.73	18.57	19.21	19.69	17.95	18.60	18.43	19.08	19.55
	6H	18.87	19.41	19.39	19.92	20.41	18.57	19.11	19.09	19.62	20.11
	8H	19.27	19.75	19.78	20.24	20.81	18.86	19.33	19.37	19.83	20.40