

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: P1058418

Luminaire Tested: S122RDR-H485D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058418
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: S122RDR-H485D935-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

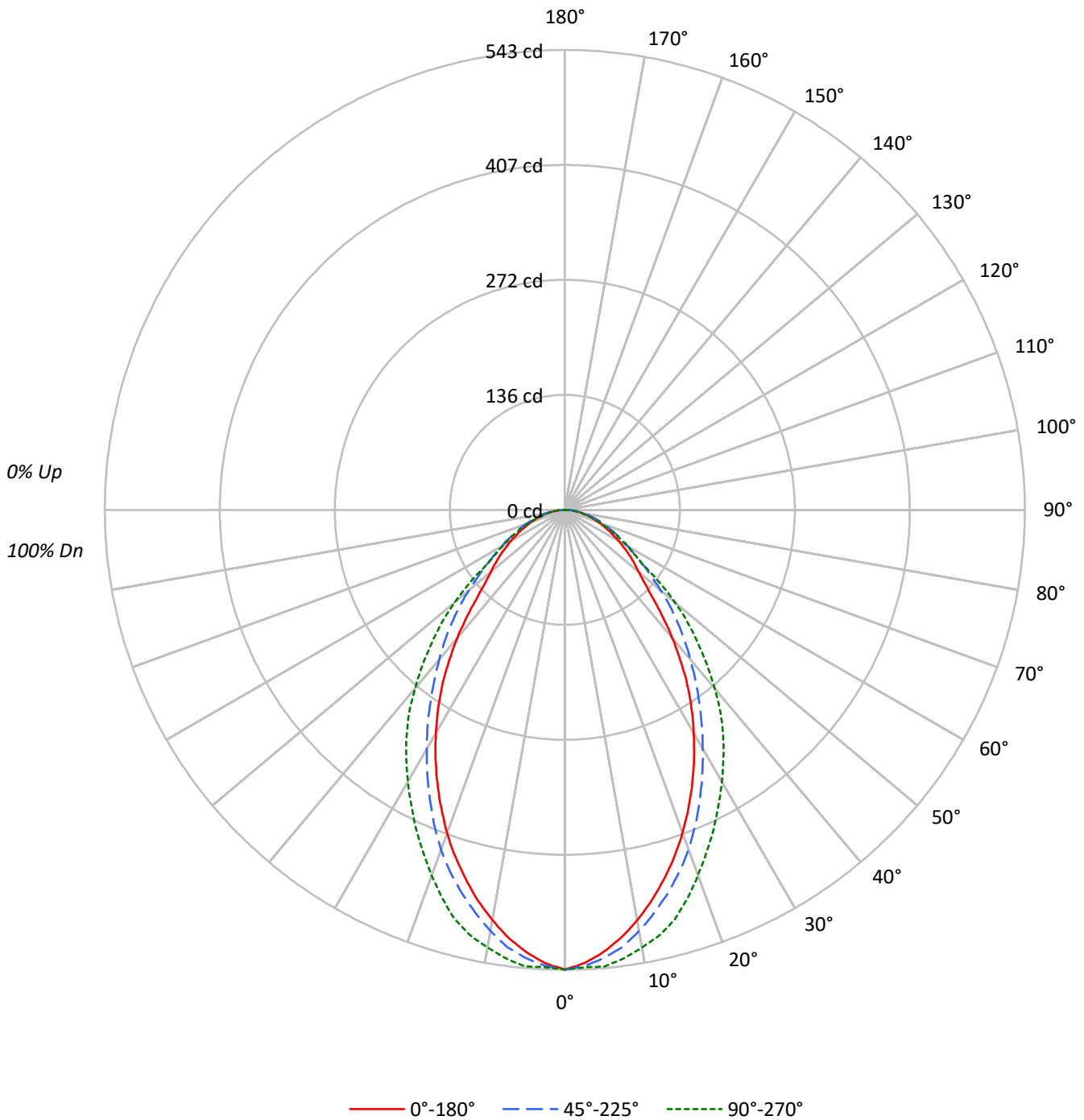
Lumens per Lamp: N/A
Luminaire Lumens: 884.9 lumens
Efficiency: N/A
Efficacy: 50.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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				
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	39	35	46	39	35	45	39	35	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10016	10016	10016
5°	9708	9838	10023
10°	9219	9460	9831
15°	8631	8954	9567
20°	7976	8389	9019
25°	7248	7676	8462
30°	6479	6940	7896
35°	5679	6220	7337
40°	4753	5552	6622
45°	3807	4919	5788
50°	3267	4240	4860
55°	2985	3606	3587
60°	2713	3189	3122
65°	2471	2856	2729
70°	2266	2611	2422
75°	2125	2417	2125
80°	1987	2232	1860
85°	1969	2350	1609

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5788 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	5.7
10°-20°	132.7	15.0
20°-30°	175.0	19.8
30°-40°	176.2	19.9
40°-50°	143.4	16.2
50°-60°	97.8	11.0
60°-70°	63.5	7.2
70°-80°	35.0	3.9
80°-90°	11.4	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°	357.7	40.4
0°-40°	533.9	60.3
0°-60°	775.1	87.6
0°-90°	884.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	884.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	543	543	543	543	543	
5°	524	534	531	536	541	49
15°	452	463	469	488	501	127
25°	356	368	377	394	416	163
35°	252	265	276	300	326	157
45°	146	164	188	205	222	115
55°	93	102	112	113	112	83
65°	57	67	65	62	62	56
75°	30	37	34	30	30	32
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°	542.8	542.8	542.8	542.8	542.8
2.5°	535.8	544.6	538.7	539.3	540.5
5°	524.1	534.0	531.1	535.8	541.1
7.5°	509.5	519.5	520.6	527.6	534.0
10°	492.0	503.1	504.9	515.4	524.7
12.5°	472.8	485.0	487.4	502.5	514.8
15°	451.8	463.4	468.7	487.9	500.8
17.5°	429.6	440.7	448.8	466.3	480.9
20°	406.2	416.7	427.2	443.0	459.3
22.5°	381.1	392.8	402.7	418.5	437.2
25°	356.0	367.7	377.0	394.0	415.6
27.5°	330.4	342.0	351.4	369.5	392.8
30°	304.1	316.3	325.7	346.1	370.6
32.5°	278.4	290.7	301.2	322.8	348.4
35°	252.1	265.0	276.1	300.0	325.7
37.5°	224.1	238.7	252.7	276.7	301.8
40°	197.3	213.6	230.5	252.7	274.9
42.5°	170.4	188.5	209.5	228.2	248.6
45°	145.9	164.0	188.5	204.9	221.8
47.5°	126.7	141.8	168.1	181.5	196.7
50°	113.8	124.3	147.7	158.2	169.3
52.5°	103.3	112.1	128.4	135.4	141.2
55°	92.8	102.1	112.1	112.6	111.5
57.5°	82.3	92.8	98.1	94.0	96.3
60°	73.5	84.0	86.4	82.3	84.6
62.5°	64.2	75.9	75.9	71.8	73.0
65°	56.6	67.1	65.4	61.9	62.5
67.5°	49.0	59.5	56.6	53.1	53.1
70°	42.0	51.9	48.4	44.9	44.9
72.5°	35.6	43.8	41.4	37.4	36.8
75°	29.8	36.8	33.9	30.4	29.8
77.5°	23.9	29.8	27.4	24.5	23.3
80°	18.7	23.9	21.0	18.7	17.5
82.5°	14.0	18.1	15.8	13.4	12.3
85°	9.3	12.3	11.1	8.8	7.6
87.5°	4.7	8.2	7.0	5.8	4.7
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	14.72	16.16	15.09	16.48	16.79	14.97	16.41	15.34	16.72	17.04
	3H	16.25	17.54	16.63	17.87	18.23	16.33	17.62	16.71	17.95	18.31
	4H	16.81	18.02	17.21	18.37	18.75	16.81	18.02	17.21	18.37	18.75
	6H	17.24	18.35	17.65	18.72	19.11	17.16	18.27	17.57	18.64	19.03
	8H	17.39	18.45	17.82	18.84	19.24	17.27	18.32	17.70	18.72	19.12
	12H	17.50	18.51	17.93	18.90	19.33	17.34	18.35	17.77	18.73	19.16
4H	2H	15.30	16.50	15.70	16.85	17.23	15.50	16.70	15.90	17.05	17.43
	3H	17.10	18.10	17.51	18.50	18.90	17.07	18.07	17.48	18.47	18.87
	4H	17.84	18.74	18.28	19.16	19.60	17.67	18.56	18.10	18.98	19.42
	6H	18.43	19.21	18.89	19.65	20.11	18.13	18.91	18.59	19.36	19.82
	8H	18.64	19.37	19.10	19.81	20.28	18.28	19.01	18.75	19.46	19.93
	12H	18.80	19.45	19.29	19.93	20.40	18.39	19.04	18.88	19.52	19.99
8H	4H	18.11	18.84	18.57	19.28	19.75	17.96	18.68	18.42	19.13	19.60
	6H	18.86	19.46	19.36	19.96	20.44	18.55	19.15	19.04	19.64	20.12
	8H	19.19	19.73	19.70	20.24	20.73	18.77	19.31	19.28	19.82	20.31
	12H	19.47	19.95	19.98	20.44	21.01	18.95	19.43	19.46	19.92	20.49
12H	4H	18.12	18.77	18.61	19.25	19.72	17.99	18.64	18.47	19.12	19.59
	6H	18.91	19.45	19.42	19.96	20.45	18.61	19.15	19.13	19.67	20.16
	8H	19.31	19.78	19.82	20.28	20.84	18.90	19.38	19.41	19.87	20.44