

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: P1057968

Luminaire Tested: S122RDRP-S485D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057968
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-S485D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

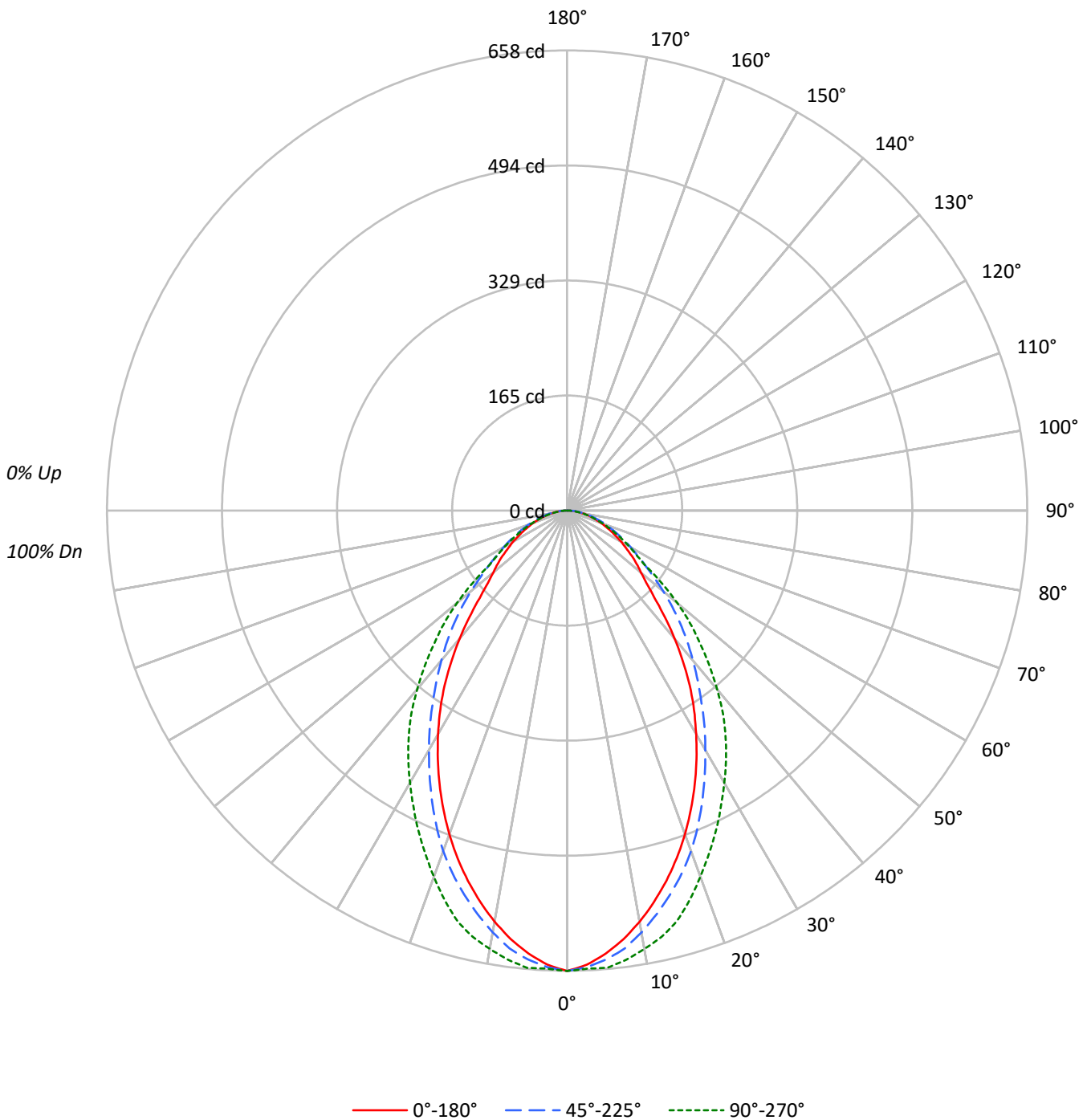
Lumens per Lamp: N/A
Luminaire Lumens: 1073.4 lumens
Efficiency: N/A
Efficacy: 54.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	12149	12149	12149
5°	11777	11934	12157
10°	11182	11475	11926
15°	10469	10860	11603
20°	9677	10176	10942
25°	8794	9313	10263
30°	7860	8418	9580
35°	6889	7544	8900
40°	5764	6737	8033
45°	4619	5968	7020
50°	3964	5141	5894
55°	3622	4372	4350
60°	3292	3868	3790
65°	3000	3462	3310
70°	2752	3172	2940
75°	2574	2930	2574
80°	2412	2710	2253
85°	2392	2858	1948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7020 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	5.7
10°-20°	160.9	15.0
20°-30°	212.2	19.8
30°-40°	213.7	19.9
40°-50°	173.9	16.2
50°-60°	118.6	11.0
60°-70°	77.0	7.2
70°-80°	42.4	3.9
80°-90°	13.8	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°	433.9	40.4
0°-40°	647.7	60.3
0°-60°	940.2	87.6
0°-90°	1073.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1073.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	636	648	644	650	656	59
15°	548	562	568	592	607	154
25°	432	446	457	478	504	198
35°	306	321	335	364	395	190
45°	177	199	229	248	269	139
55°	113	124	136	137	135	101
65°	69	81	79	75	76	68
75°	36	45	41	37	36	38
85°	11	15	14	11	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	658.4	658.4	658.4	658.4	658.4
2.5°	649.9	660.5	653.5	654.2	655.6
5°	635.8	647.8	644.3	649.9	656.3
7.5°	618.1	630.1	631.5	640.0	647.8
10°	596.8	610.3	612.4	625.1	636.5
12.5°	573.5	588.3	591.2	609.6	624.4
15°	548.0	562.1	568.5	591.9	607.4
17.5°	521.1	534.5	544.4	565.7	583.4
20°	492.8	505.5	518.2	537.4	557.2
22.5°	462.3	476.5	488.5	507.6	530.3
25°	431.9	446.0	457.4	477.9	504.1
27.5°	400.7	414.9	426.2	448.1	476.5
30°	368.9	383.7	395.1	419.8	449.6
32.5°	337.7	352.6	365.3	391.5	422.7
35°	305.8	321.4	334.9	363.9	395.1
37.5°	271.9	289.6	306.6	335.6	366.0
40°	239.3	259.1	279.7	306.6	333.5
42.5°	206.7	228.7	254.2	276.8	301.6
45°	177.0	198.9	228.7	248.5	269.0
47.5°	153.6	172.0	203.9	220.2	238.6
50°	138.1	150.8	179.1	191.9	205.3
52.5°	125.3	135.9	155.8	164.3	171.3
55°	112.6	123.9	135.9	136.6	135.2
57.5°	99.8	112.6	118.9	114.0	116.8
60°	89.2	101.9	104.8	99.8	102.7
62.5°	77.9	92.0	92.0	87.1	88.5
65°	68.7	81.4	79.3	75.0	75.8
67.5°	59.5	72.2	68.7	64.4	64.4
70°	51.0	63.0	58.8	54.5	54.5
72.5°	43.2	53.1	50.3	45.3	44.6
75°	36.1	44.6	41.1	36.8	36.1
77.5°	29.0	36.1	33.3	29.7	28.3
80°	22.7	29.0	25.5	22.7	21.2
82.5°	17.0	21.9	19.1	16.3	14.9
85°	11.3	14.9	13.5	10.6	9.2
87.5°	5.7	9.9	8.5	7.1	5.7
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	15.40	16.83	15.76	17.15	17.46	15.64	17.08	16.01	17.39	17.71
	3H	16.92	18.21	17.30	18.54	18.90	17.00	18.29	17.38	18.62	18.98
	4H	17.49	18.69	17.89	19.04	19.42	17.48	18.69	17.88	19.04	19.42
	6H	17.91	19.02	18.32	19.39	19.78	17.83	18.94	18.24	19.31	19.70
	8H	18.06	19.12	18.49	19.51	19.91	17.94	18.99	18.37	19.38	19.79
	12H	18.18	19.19	18.61	19.57	20.00	18.01	19.02	18.44	19.40	19.83
4H	2H	15.97	17.17	16.37	17.52	17.90	16.17	17.37	16.57	17.72	18.10
	3H	17.77	18.77	18.18	19.17	19.57	17.74	18.74	18.15	19.14	19.54
	4H	18.51	19.41	18.95	19.83	20.27	18.33	19.23	18.77	19.65	20.09
	6H	19.10	19.88	19.56	20.32	20.79	18.80	19.58	19.26	20.03	20.49
	8H	19.31	20.04	19.78	20.48	20.95	18.95	19.68	19.42	20.13	20.60
	12H	19.48	20.12	19.96	20.60	21.08	19.06	19.71	19.55	20.19	20.66
8H	4H	18.78	19.51	19.24	19.95	20.42	18.63	19.35	19.09	19.80	20.27
	6H	19.53	20.14	20.03	20.63	21.11	19.22	19.82	19.71	20.31	20.79
	8H	19.86	20.40	20.38	20.91	21.40	19.44	19.98	19.95	20.49	20.98
	12H	20.14	20.62	20.65	21.11	21.68	19.62	20.10	20.13	20.59	21.16
12H	4H	18.79	19.44	19.28	19.92	20.39	18.66	19.31	19.14	19.79	20.26
	6H	19.58	20.12	20.10	20.63	21.12	19.28	19.82	19.80	20.34	20.82
	8H	19.98	20.45	20.49	20.95	21.51	19.57	20.05	20.08	20.54	21.11