

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: P1055244

Luminaire Tested: S122R3DR-S675D935-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1055244
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S675D935-X4F0-XX-UDD-F-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

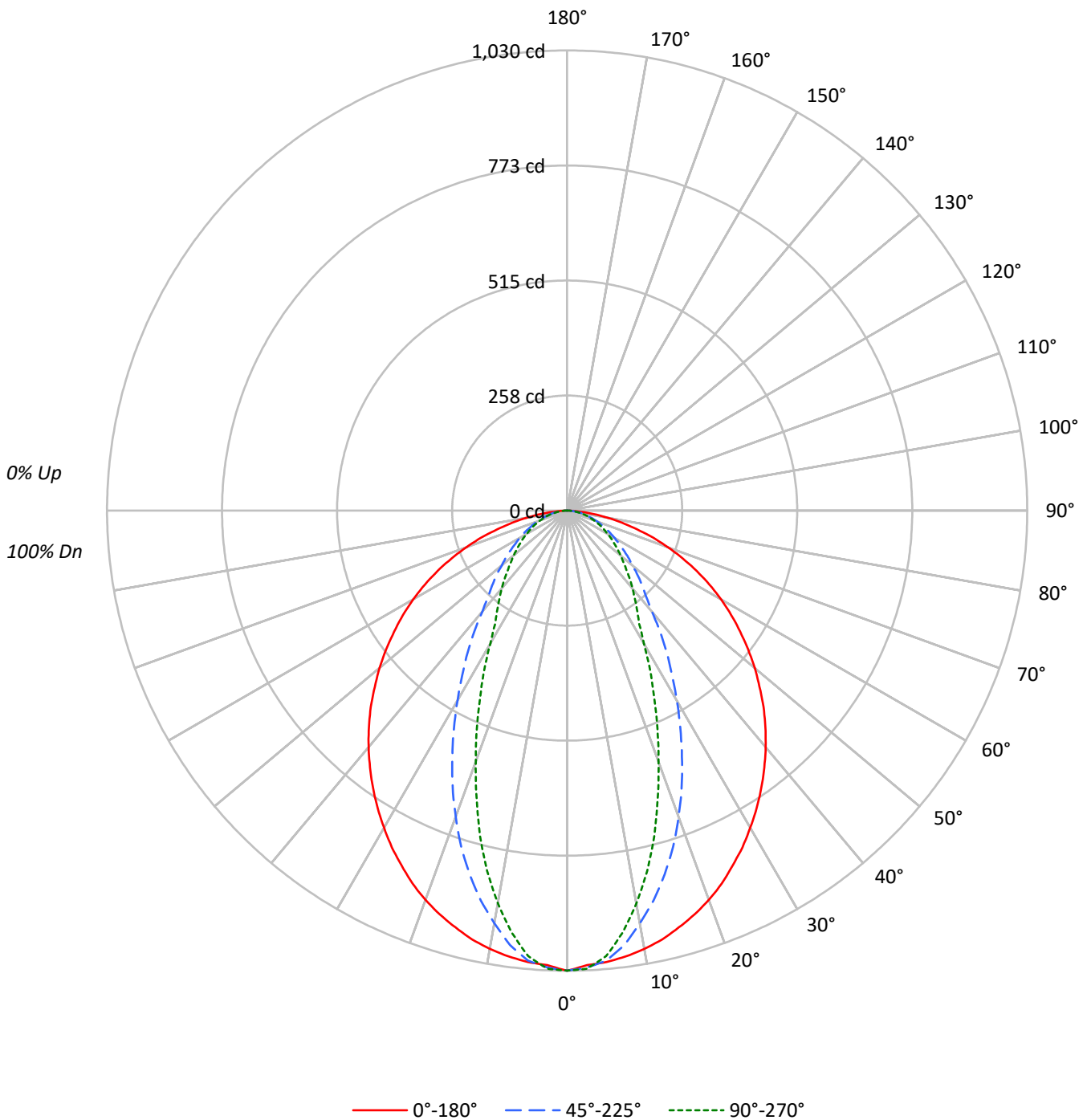
Lumens per Lamp: N/A
Luminaire Lumens: 1557.6 lumens
Efficiency: N/A
Efficacy: 59.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19510	19510	19510
5°	19290	19224	19043
10°	19165	18038	17178
15°	18947	16533	14777
20°	18696	14704	12065
25°	18323	12708	9629
30°	17932	10737	7515
35°	17525	8981	6312
40°	17100	7284	5622
45°	16655	6366	5029
50°	16167	5633	4592
55°	15614	5090	4264
60°	15073	4634	3979
65°	14359	4245	3743
70°	13306	3961	3529
75°	11785	3594	3338
80°	10049	3382	3099
85°	6934	3000	2804

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16655 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	6.1
10°-20°	238.2	15.3
20°-30°	293.6	18.8
30°-40°	281.7	18.1
40°-50°	242.9	15.6
50°-60°	188.5	12.1
60°-70°	129.1	8.3
70°-80°	70.1	4.5
80°-90°	19.2	1.2
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°	626.2	40.2
0°-40°	907.8	58.3
0°-60°	1339.2	86.0
0°-90°	1557.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1557.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1014	1029	1011	998	1001	96
15°	966	937	843	774	753	272
25°	876	783	608	496	461	404
35°	758	601	388	289	273	474
45°	622	418	238	196	188	479
55°	473	251	154	134	129	423
65°	320	137	95	86	84	316
75°	161	63	49	46	46	172
85°	32	16	14	14	13	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1029.8	1029.8	1029.8	1029.8	1029.8
2.5°	1018.6	1035.8	1023.7	1023.7	1026.3
5°	1014.3	1028.9	1010.8	997.9	1001.3
7.5°	1006.5	1016.8	980.7	953.1	952.3
10°	996.2	997.0	937.6	901.5	892.9
12.5°	983.3	969.5	893.7	839.5	826.6
15°	966.0	936.8	842.9	774.0	753.4
17.5°	948.0	903.2	788.7	702.6	674.2
20°	927.3	862.7	729.3	631.1	598.4
22.5°	904.0	824.0	669.9	562.2	527.8
25°	876.5	782.6	607.9	495.9	460.6
27.5°	849.8	740.5	548.5	437.4	401.2
30°	819.7	694.8	490.8	381.4	343.5
32.5°	789.5	648.3	437.4	328.0	299.6
35°	757.7	601.0	388.3	289.3	272.9
37.5°	725.0	554.5	341.8	263.5	248.8
40°	691.4	508.0	294.5	238.5	227.3
42.5°	656.9	462.4	261.7	217.8	207.5
45°	621.6	418.4	237.6	196.3	187.7
47.5°	583.8	374.5	214.4	178.2	170.5
50°	548.5	332.3	191.1	161.9	155.8
52.5°	510.6	291.0	172.2	147.2	142.1
55°	472.7	251.4	154.1	133.5	129.1
57.5°	435.7	213.5	136.9	120.5	117.1
60°	397.8	183.4	122.3	108.5	105.0
62.5°	359.0	159.3	108.5	97.3	93.8
65°	320.3	136.9	94.7	86.1	83.5
67.5°	279.8	115.4	82.7	75.8	74.0
70°	240.2	96.4	71.5	65.4	63.7
72.5°	201.5	78.4	60.3	56.0	54.2
75°	161.0	62.9	49.1	46.5	45.6
77.5°	125.7	49.1	39.6	37.9	37.0
80°	92.1	36.2	31.0	29.3	28.4
82.5°	61.1	25.0	22.4	21.5	20.7
85°	31.9	15.5	13.8	13.8	12.9
87.5°	10.3	6.9	6.9	6.9	6.0
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	19.93	21.40	20.30	21.71	22.03	14.73	16.20	15.10	16.52	16.83
	3H	22.26	23.58	22.64	23.90	24.27	16.38	17.70	16.76	18.03	18.39
	4H	23.16	24.39	23.56	24.74	25.12	17.02	18.25	17.42	18.60	18.98
	6H	23.82	24.96	24.23	25.33	25.72	17.51	18.65	17.92	19.02	19.41
	8H	24.03	25.11	24.45	25.50	25.90	17.68	18.77	18.11	19.16	19.56
	12H	24.14	25.18	24.57	25.56	25.99	17.80	18.84	18.23	19.22	19.65
4H	2H	19.95	21.18	20.35	21.53	21.91	15.45	16.68	15.85	17.03	17.41
	3H	22.36	23.38	22.77	23.78	24.19	17.30	18.32	17.71	18.72	19.13
	4H	23.29	24.21	23.72	24.63	25.07	18.05	18.97	18.48	19.39	19.82
	6H	24.07	24.87	24.53	25.31	25.77	18.66	19.46	19.12	19.91	20.37
	8H	24.34	25.09	24.80	25.53	26.00	18.88	19.63	19.34	20.07	20.54
	12H	24.51	25.18	25.00	25.66	26.13	19.04	19.71	19.52	20.19	20.66
8H	4H	23.28	24.03	23.75	24.48	24.94	18.42	19.17	18.89	19.62	20.09
	6H	24.09	24.71	24.59	25.20	25.68	19.16	19.78	19.66	20.27	20.75
	8H	24.39	24.95	24.91	25.46	25.95	19.46	20.01	19.97	20.52	21.01
	12H	24.62	25.11	25.13	25.60	26.17	19.70	20.19	20.21	20.68	21.25
12H	4H	23.26	23.93	23.75	24.41	24.88	18.48	19.15	18.97	19.63	20.10
	6H	24.07	24.62	24.58	25.13	25.62	19.25	19.80	19.76	20.31	20.80
	8H	24.40	24.89	24.91	25.38	25.95	19.61	20.09	20.12	20.59	21.15