

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: P1055243

Luminaire Tested: S122R3DRP-S675D935-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1055243
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DRP-S675D935-X4F0-XX-UDD-F-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

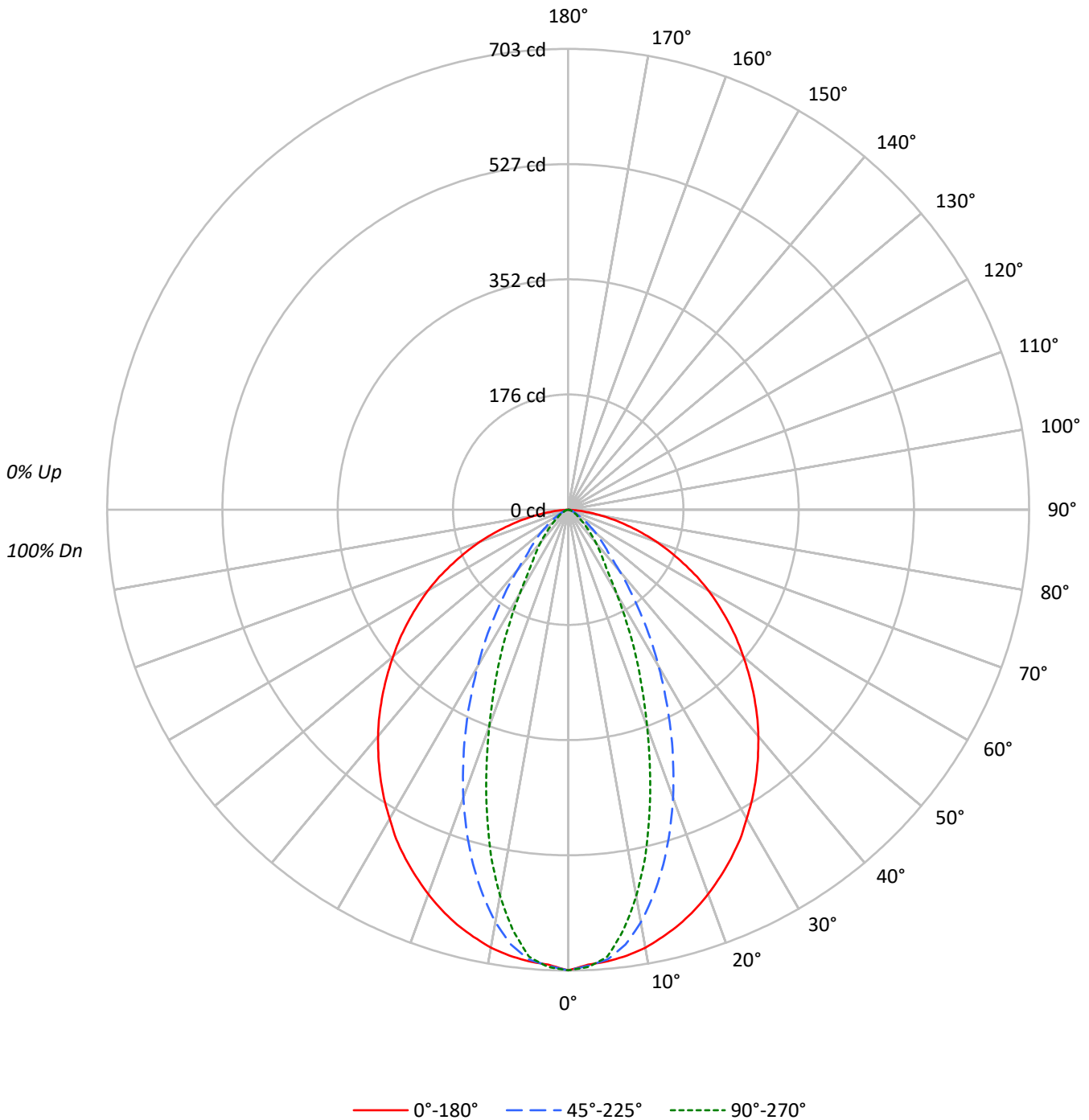
Lumens per Lamp: N/A
Luminaire Lumens: 805.2 lumens
Efficiency: N/A
Efficacy: 30.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13311	13311	13311
5°	13149	13100	13018
10°	13053	12291	11512
15°	12851	10994	9389
20°	12585	9426	7083
25°	12275	7722	5057
30°	11905	6027	3220
35°	11550	4420	2151
40°	11159	2980	1617
45°	10728	2101	1152
50°	10278	1598	813
55°	9840	1110	598
60°	9363	750	489
65°	8684	542	386
70°	7916	427	332
75°	6866	381	249
80°	5444	284	284
85°	3000	370	196

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10728 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.2	8.0
10°-20°	157.7	19.6
20°-30°	180.1	22.4
30°-40°	152.7	19.0
40°-50°	114.0	14.2
50°-60°	73.7	9.1
60°-70°	41.1	5.1
70°-80°	18.0	2.2
80°-90°	3.7	0.5
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°	402.0	49.9
0°-40°	554.7	68.9
0°-60°	742.3	92.2
0°-90°	805.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	805.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	691	700	689	682	684	66
15°	655	639	560	501	479	184
25°	587	518	369	270	242	270
35°	499	376	191	104	93	312
45°	400	238	78	51	43	309
55°	298	113	34	21	18	266
65°	194	41	12	10	9	193
75°	94	9	5	4	3	100
85°	14	1	2	1	1	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	702.6	702.6	702.6	702.6	702.6
2.5°	694.8	705.2	696.5	696.5	698.3
5°	691.4	700.0	688.8	681.9	684.5
7.5°	686.2	692.2	669.0	648.3	646.6
10°	678.5	681.0	638.9	607.0	598.4
12.5°	667.3	661.2	601.8	557.1	542.4
15°	655.2	638.9	560.5	501.1	478.7
17.5°	640.6	611.3	514.9	442.6	415.0
20°	624.2	582.9	467.5	381.4	351.3
22.5°	606.1	551.0	418.4	323.7	293.6
25°	587.2	518.3	369.4	270.4	241.9
27.5°	567.4	483.9	321.2	222.1	191.1
30°	544.2	448.6	275.5	175.6	147.2
32.5°	522.6	411.6	233.3	136.0	111.9
35°	499.4	376.3	191.1	104.2	93.0
37.5°	475.3	341.0	154.1	87.8	78.4
40°	451.2	305.7	120.5	74.0	65.4
42.5°	426.2	271.2	93.0	62.0	53.4
45°	400.4	237.6	78.4	50.8	43.0
47.5°	374.5	204.1	65.4	40.5	34.4
50°	348.7	172.2	54.2	31.9	27.6
52.5°	323.7	142.1	43.0	25.8	22.4
55°	297.9	112.8	33.6	20.7	18.1
57.5°	272.1	87.8	25.8	17.2	15.5
60°	247.1	66.3	19.8	13.8	12.9
62.5°	221.3	53.4	15.5	11.2	10.3
65°	193.7	41.3	12.1	9.5	8.6
67.5°	168.8	30.1	9.5	7.7	6.9
70°	142.9	20.7	7.7	6.9	6.0
72.5°	118.0	12.9	6.0	5.2	5.2
75°	93.8	8.6	5.2	4.3	3.4
77.5°	71.5	5.2	3.4	3.4	2.6
80°	49.9	3.4	2.6	2.6	2.6
82.5°	31.0	2.6	1.7	1.7	1.7
85°	13.8	0.9	1.7	0.9	0.9
87.5°	2.6	0.9	0.9	0.9	0.9
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	17.24	18.56	17.61	18.88	19.19	3.55	4.87	3.91	5.18	5.50
	3H	19.71	20.89	20.09	21.22	21.58	4.40	5.57	4.78	5.90	6.26
	4H	20.67	21.76	21.07	22.11	22.50	4.67	5.76	5.07	6.11	6.50
	6H	21.36	22.36	21.77	22.73	23.13	4.86	5.87	5.28	6.24	6.63
	8H	21.55	22.50	21.98	22.89	23.30	4.94	5.89	5.37	6.28	6.68
	12H	21.64	22.54	22.07	22.93	23.36	4.96	5.87	5.40	6.26	6.69
4H	2H	17.03	18.12	17.43	18.47	18.86	4.13	5.22	4.53	5.57	5.95
	3H	19.51	20.41	19.93	20.81	21.22	5.16	6.05	5.57	6.46	6.86
	4H	20.46	21.26	20.89	21.68	22.12	5.52	6.32	5.96	6.74	7.19
	6H	21.21	21.90	21.68	22.35	22.82	5.82	6.51	6.28	6.95	7.42
	8H	21.46	22.10	21.92	22.55	23.02	5.91	6.56	6.38	7.00	7.48
	12H	21.58	22.15	22.07	22.64	23.11	5.96	6.53	6.45	7.01	7.49
8H	4H	20.32	20.97	20.79	21.42	21.89	5.89	6.54	6.36	6.99	7.46
	6H	21.06	21.59	21.57	22.08	22.57	6.26	6.78	6.76	7.28	7.76
	8H	21.31	21.78	21.83	22.29	22.79	6.39	6.86	6.91	7.38	7.87
	12H	21.46	21.87	21.97	22.37	22.94	6.48	6.89	6.99	7.39	7.96
12H	4H	20.28	20.85	20.77	21.33	21.81	6.02	6.58	6.50	7.07	7.54
	6H	21.00	21.47	21.52	21.99	22.48	6.37	6.85	6.90	7.36	7.85
	8H	21.27	21.68	21.78	22.18	22.75	6.55	6.97	7.07	7.46	8.03