

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: P1058049

Luminaire Tested: S122RDRP-S675D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058049
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-S675D835-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

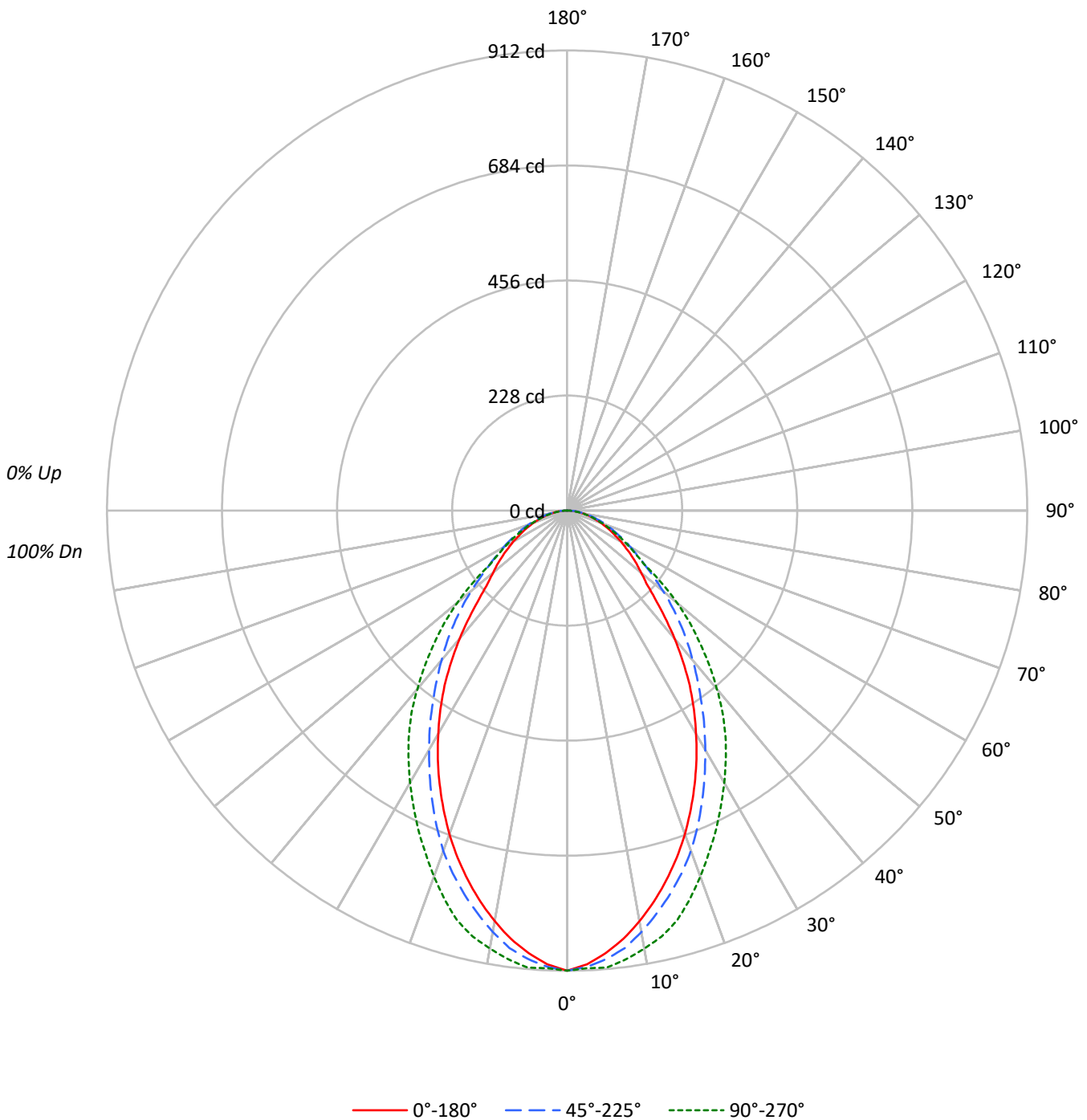
Lumens per Lamp: N/A
Luminaire Lumens: 1486.4 lumens
Efficiency: N/A
Efficacy: 57.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	100	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°	16825	16825	16825
5°	16308	16524	16834
10°	15486	15889	16515
15°	14496	15038	16070
20°	13398	14091	15152
25°	12175	12894	14211
30°	10884	11657	13264
35°	9540	10445	12324
40°	7983	9329	11124
45°	6396	8265	9721
50°	5489	7119	8161
55°	5015	6055	6026
60°	4558	5355	5248
65°	4152	4794	4580
70°	3809	4392	4073
75°	3565	4057	3565
80°	3337	3751	3124
85°	3324	3938	2689

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9721 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.2	5.7
10°-20°	222.8	15.0
20°-30°	293.9	19.8
30°-40°	296.0	19.9
40°-50°	240.9	16.2
50°-60°	164.2	11.0
60°-70°	106.6	7.2
70°-80°	58.7	3.9
80°-90°	19.1	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°	600.9	40.4
0°-40°	896.9	60.3
0°-60°	1302.0	87.6
0°-90°	1486.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1486.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	880	897	892	900	909	82
15°	759	778	787	820	841	213
25°	598	618	633	662	698	274
35°	424	445	464	504	547	263
45°	245	276	317	344	372	193
55°	156	172	188	189	187	140
65°	95	113	110	104	105	95
75°	50	62	57	51	50	53
85°	16	21	19	15	13	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	911.8	911.8	911.8	911.8	911.8
2.5°	900.0	914.7	904.9	905.9	907.8
5°	880.4	897.0	892.1	900.0	908.8
7.5°	855.9	872.5	874.5	886.3	897.0
10°	826.5	845.1	848.0	865.7	881.4
12.5°	794.1	814.7	818.6	844.1	864.7
15°	758.8	778.4	787.2	819.6	841.2
17.5°	721.6	740.2	753.9	783.3	807.8
20°	682.3	700.0	717.6	744.1	771.6
22.5°	640.2	659.8	676.5	702.9	734.3
25°	598.0	617.6	633.3	661.8	698.0
27.5°	554.9	574.5	590.2	620.6	659.8
30°	510.8	531.4	547.1	581.4	622.5
32.5°	467.6	488.2	505.9	542.2	585.3
35°	423.5	445.1	463.7	503.9	547.1
37.5°	376.5	401.0	424.5	464.7	506.9
40°	331.4	358.8	387.3	424.5	461.8
42.5°	286.3	316.7	352.0	383.3	417.6
45°	245.1	275.5	316.7	344.1	372.5
47.5°	212.7	238.2	282.3	304.9	330.4
50°	191.2	208.8	248.0	265.7	284.3
52.5°	173.5	188.2	215.7	227.4	237.3
55°	155.9	171.6	188.2	189.2	187.3
57.5°	138.2	155.9	164.7	157.8	161.8
60°	123.5	141.2	145.1	138.2	142.2
62.5°	107.8	127.4	127.4	120.6	122.5
65°	95.1	112.7	109.8	103.9	104.9
67.5°	82.4	100.0	95.1	89.2	89.2
70°	70.6	87.3	81.4	75.5	75.5
72.5°	59.8	73.5	69.6	62.7	61.8
75°	50.0	61.8	56.9	51.0	50.0
77.5°	40.2	50.0	46.1	41.2	39.2
80°	31.4	40.2	35.3	31.4	29.4
82.5°	23.5	30.4	26.5	22.5	20.6
85°	15.7	20.6	18.6	14.7	12.7
87.5°	7.8	13.7	11.8	9.8	7.8
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	16.53	17.97	16.89	18.28	18.59	16.77	18.21	17.14	18.52	18.84
	3H	18.06	19.34	18.43	19.67	20.03	18.13	19.42	18.51	19.75	20.11
	4H	18.62	19.82	19.02	20.17	20.55	18.61	19.82	19.01	20.17	20.55
	6H	19.04	20.15	19.45	20.52	20.91	18.96	20.07	19.37	20.44	20.83
	8H	19.19	20.25	19.62	20.64	21.04	19.07	20.13	19.50	20.52	20.92
	12H	19.31	20.32	19.74	20.70	21.13	19.14	20.15	19.57	20.53	20.96
4H	2H	17.10	18.30	17.50	18.65	19.03	17.30	18.50	17.70	18.85	19.23
	3H	18.90	19.90	19.31	20.30	20.70	18.87	19.87	19.28	20.27	20.67
	4H	19.65	20.54	20.08	20.96	21.40	19.47	20.36	19.90	20.78	21.22
	6H	20.23	21.01	20.69	21.46	21.92	19.93	20.71	20.39	21.16	21.62
	8H	20.44	21.17	20.91	21.62	22.08	20.08	20.81	20.55	21.26	21.73
	12H	20.61	21.26	21.09	21.74	22.21	20.19	20.84	20.68	21.32	21.79
8H	4H	19.91	20.64	20.38	21.08	21.55	19.76	20.49	20.22	20.93	21.40
	6H	20.67	21.27	21.16	21.76	22.24	20.35	20.95	20.85	21.44	21.92
	8H	20.99	21.53	21.51	22.04	22.53	20.57	21.11	21.09	21.62	22.11
	12H	21.27	21.75	21.78	22.24	22.81	20.75	21.23	21.26	21.72	22.29
12H	4H	19.92	20.57	20.41	21.05	21.53	19.79	20.44	20.27	20.92	21.39
	6H	20.71	21.25	21.23	21.76	22.25	20.41	20.96	20.93	21.47	21.96
	8H	21.11	21.59	21.62	22.08	22.65	20.70	21.18	21.21	21.67	22.24