

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: P1058040

Luminaire Tested: S122RDRP-S675D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058040  
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-S675D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

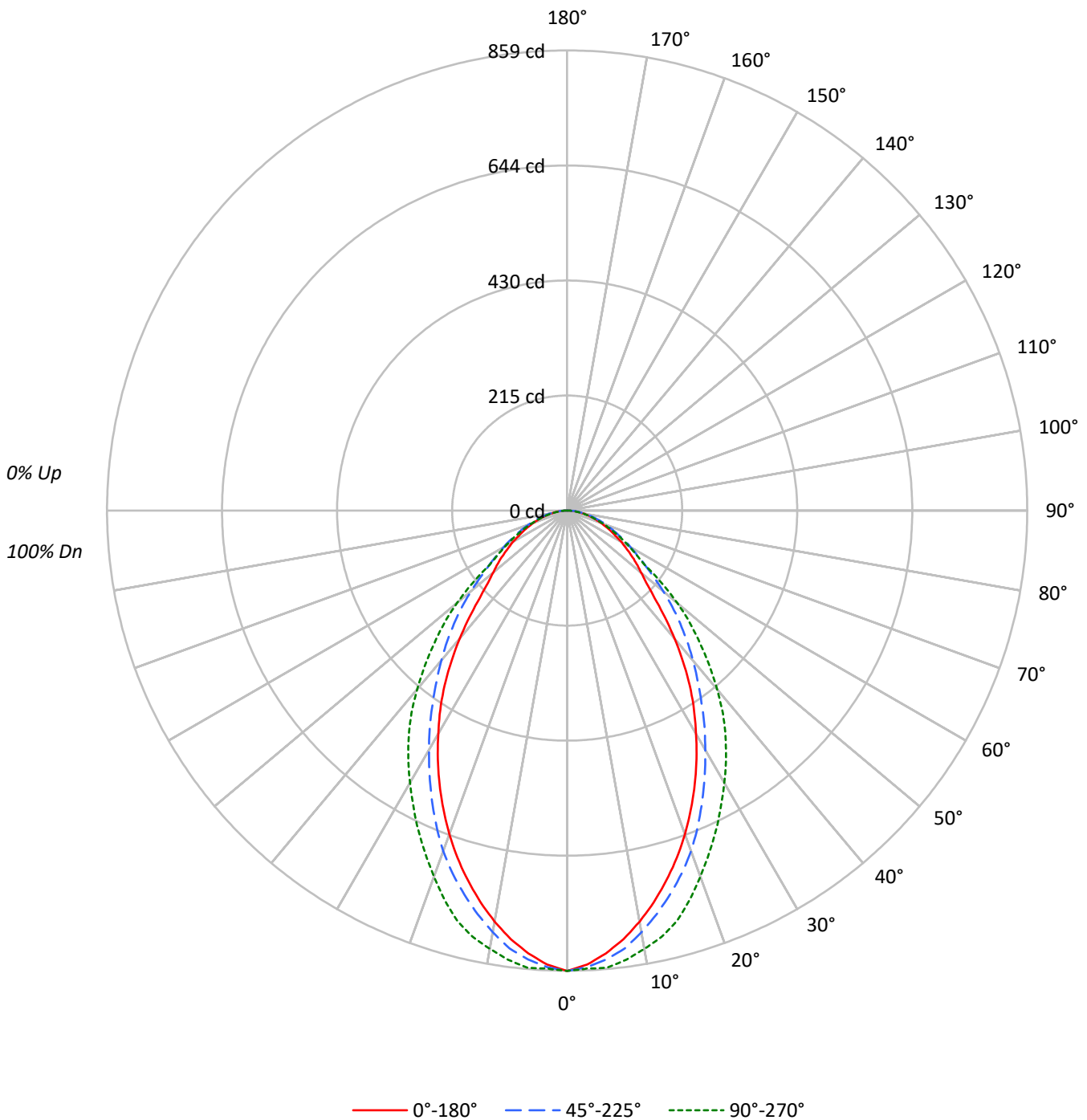
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1401.0 lumens  
Efficiency: N/A  
Efficacy: 54.3 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<sub>in</sub>): 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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					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°	15858	15858	15858
5°	15370	15576	15867
10°	14596	14977	15565
15°	13663	14175	15145
20°	12628	13282	14280
25°	11477	12153	13395
30°	10257	10986	12503
35°	8993	9846	11615
40°	7523	8792	10483
45°	6028	7790	9162
50°	5173	6712	7693
55°	4726	5707	5678
60°	4296	5049	4945
65°	3912	4519	4318
70°	3588	4138	3841
75°	3358	3821	3358
80°	3145	3539	2943
85°	3133	3726	2541

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9162 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.3	5.7
10°-20°	210.0	15.0
20°-30°	277.0	19.8
30°-40°	279.0	19.9
40°-50°	227.0	16.2
50°-60°	154.8	11.0
60°-70°	100.5	7.2
70°-80°	55.3	3.9
80°-90°	18.0	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°	566.4	40.4
0°-40°	845.3	60.3
0°-60°	1227.1	87.6
0°-90°	1401.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1401.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	830	846	841	848	857	78
15°	715	734	742	772	793	200
25°	564	582	597	624	658	258
35°	399	420	437	475	516	248
45°	231	260	298	324	351	182
55°	147	162	177	178	176	132
65°	90	106	104	98	99	89
75°	47	58	54	48	47	50
85°	15	19	18	14	12	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	859.4	859.4	859.4	859.4	859.4
2.5°	848.3	862.1	852.9	853.8	855.7
5°	829.8	845.5	840.9	848.3	856.6
7.5°	806.7	822.4	824.3	835.3	845.5
10°	779.0	796.5	799.3	815.9	830.7
12.5°	748.5	767.9	771.6	795.6	815.0
15°	715.2	733.7	742.0	772.5	792.8
17.5°	680.1	697.7	710.6	738.3	761.4
20°	643.1	659.8	676.4	701.4	727.2
22.5°	603.4	621.9	637.6	662.5	692.1
25°	563.7	582.2	596.9	623.7	657.9
27.5°	523.0	541.5	556.3	584.9	621.9
30°	481.4	500.8	515.6	548.0	586.8
32.5°	440.8	460.2	476.8	511.0	551.7
35°	399.2	419.5	437.1	475.0	515.6
37.5°	354.8	377.9	400.1	438.0	477.7
40°	312.3	338.2	365.0	400.1	435.2
42.5°	269.8	298.5	331.7	361.3	393.6
45°	231.0	259.7	298.5	324.3	351.1
47.5°	200.5	224.5	266.1	287.4	311.4
50°	180.2	196.8	233.8	250.4	268.0
52.5°	163.6	177.4	203.3	214.4	223.6
55°	146.9	161.7	177.4	178.3	176.5
57.5°	130.3	146.9	155.2	148.8	152.5
60°	116.4	133.1	136.8	130.3	134.0
62.5°	101.6	120.1	120.1	113.7	115.5
65°	89.6	106.3	103.5	97.9	98.9
67.5°	77.6	94.3	89.6	84.1	84.1
70°	66.5	82.2	76.7	71.2	71.2
72.5°	56.4	69.3	65.6	59.1	58.2
75°	47.1	58.2	53.6	48.1	47.1
77.5°	37.9	47.1	43.4	38.8	37.0
80°	29.6	37.9	33.3	29.6	27.7
82.5°	22.2	28.6	24.9	21.3	19.4
85°	14.8	19.4	17.6	13.9	12.0
87.5°	7.4	12.9	11.1	9.2	7.4
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	16.32	17.76	16.69	18.07	18.39	16.57	18.01	16.93	18.32	18.64
	3H	17.85	19.14	18.23	19.46	19.83	17.93	19.21	18.31	19.54	19.91
	4H	18.41	19.62	18.81	19.96	20.35	18.41	19.61	18.81	19.96	20.34
	6H	18.83	19.95	19.25	20.31	20.71	18.76	19.87	19.17	20.24	20.63
	8H	18.99	20.04	19.42	20.43	20.84	18.87	19.92	19.29	20.31	20.71
	12H	19.10	20.11	19.53	20.49	20.92	18.93	19.95	19.36	20.33	20.76
4H	2H	16.89	18.10	17.29	18.45	18.83	17.09	18.30	17.49	18.65	19.03
	3H	18.70	19.69	19.11	20.10	20.50	18.67	19.67	19.08	20.07	20.47
	4H	19.44	20.34	19.87	20.75	21.19	19.26	20.16	19.69	20.58	21.02
	6H	20.02	20.80	20.48	21.25	21.71	19.73	20.51	20.19	20.95	21.42
	8H	20.23	20.96	20.70	21.41	21.88	19.88	20.61	20.35	21.05	21.52
	12H	20.40	21.05	20.88	21.53	22.00	19.99	20.64	20.47	21.12	21.59
8H	4H	19.70	20.43	20.17	20.88	21.35	19.55	20.28	20.02	20.73	21.19
	6H	20.46	21.06	20.96	21.55	22.03	20.14	20.74	20.64	21.24	21.72
	8H	20.78	21.32	21.30	21.84	22.32	20.36	20.90	20.88	21.42	21.91
	12H	21.07	21.54	21.58	22.04	22.60	20.55	21.03	21.06	21.52	22.09
12H	4H	19.72	20.37	20.20	20.85	21.32	19.59	20.23	20.07	20.71	21.19
	6H	20.50	21.04	21.02	21.56	22.05	20.21	20.75	20.73	21.26	21.75
	8H	20.90	21.38	21.41	21.87	22.44	20.50	20.97	21.01	21.47	22.03