

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: P1059334

Luminaire Tested: S123RDRP-S775D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059334  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S775D830-X4F0-XX-UDD-WVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

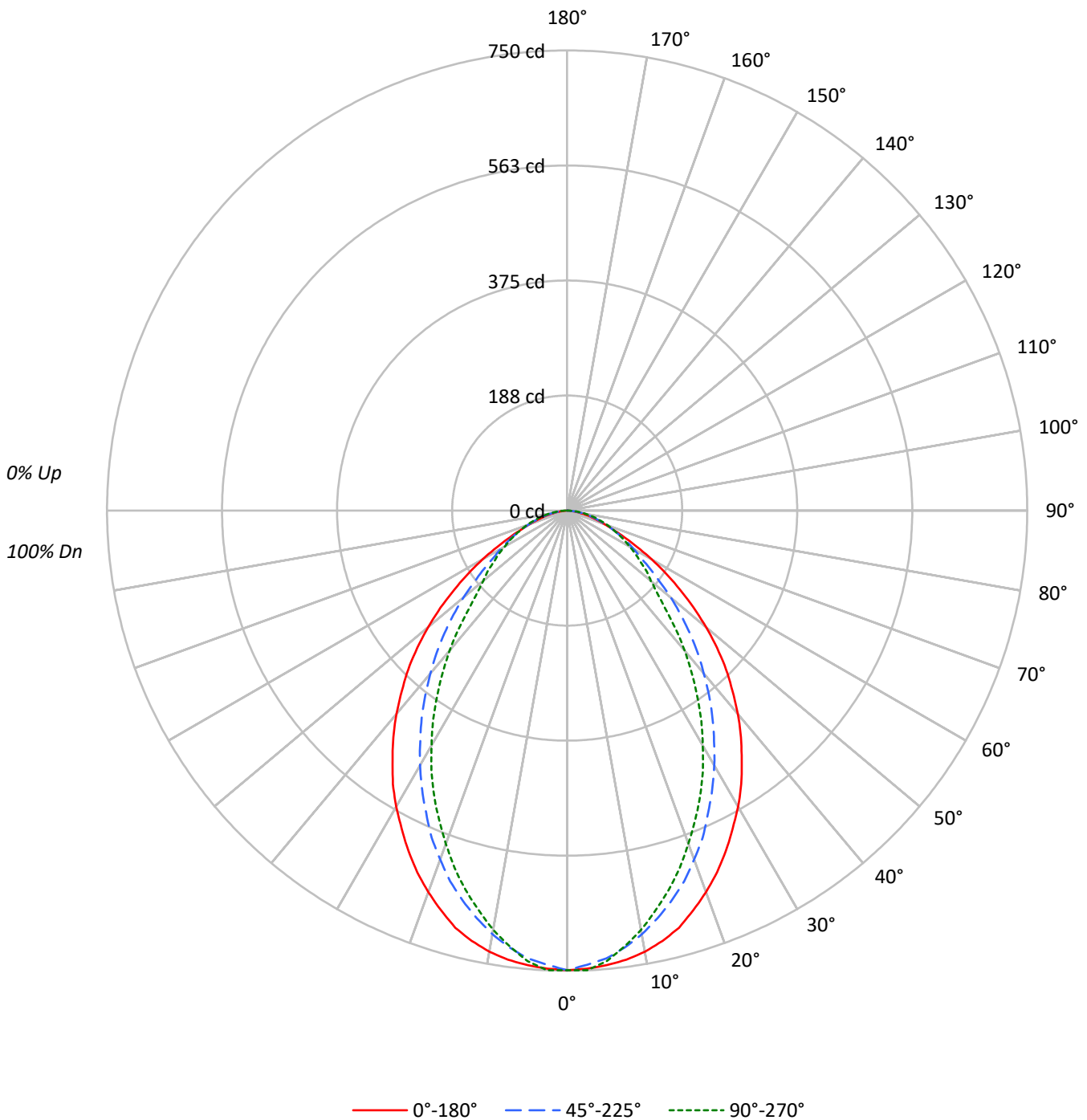
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1309.9 lumens  
Efficiency: N/A  
Efficacy: 50.8 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09  
Luminous Opening: Rectangular (W 0.23' 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
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	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
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	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8795	8795	8795
5°	8765	8638	8691
10°	8705	8361	8275
15°	8557	7999	7780
20°	8267	7559	7221
25°	7931	7044	6648
30°	7555	6506	5993
35°	7110	5923	5304
40°	6637	5313	4568
45°	6085	4695	3751
50°	5395	4028	3255
55°	4588	3372	2985
60°	3741	2938	2769
65°	2851	2601	2576
70°	2225	2317	2410
75°	1797	2082	2246
80°	1339	1704	2069
85°	728	1091	1819

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6085 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.5	5.3
10°-20°	187.0	14.3
20°-30°	254.3	19.4
30°-40°	263.6	20.1
40°-50°	222.3	17.0
50°-60°	157.8	12.0
60°-70°	96.4	7.4
70°-80°	48.0	3.7
80°-90°	10.9	0.8
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°	510.8	39.0
0°-40°	774.4	59.1
0°-60°	1154.6	88.1
0°-90°	1309.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1309.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	744	744	733	737	737	71
15°	704	690	658	646	640	198
25°	612	585	544	524	513	281
35°	496	458	413	384	370	310
45°	366	328	283	244	226	281
55°	224	201	165	150	146	201
65°	103	99	94	94	93	105
75°	40	42	46	48	50	43
85°	5	6	8	12	14	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	749.0	749.0	749.0	749.0	749.0
2.5°	747.2	748.1	740.9	749.0	749.9
5°	743.6	743.6	732.8	737.3	737.3
7.5°	738.2	736.4	718.3	718.3	716.5
10°	730.1	724.6	701.2	696.7	694.0
12.5°	718.3	709.3	680.5	672.4	667.0
15°	703.9	690.4	658.0	646.3	640.0
17.5°	683.2	669.7	633.7	617.5	610.3
20°	661.6	641.8	604.9	588.7	577.9
22.5°	638.2	613.0	577.0	557.2	545.5
25°	612.1	585.1	543.7	523.9	513.1
27.5°	584.2	554.5	512.2	489.7	478.9
30°	557.2	523.0	479.8	454.6	442.0
32.5°	528.4	489.7	445.6	419.5	406.9
35°	496.0	458.2	413.2	384.4	370.0
37.5°	465.4	426.7	379.9	349.3	333.1
40°	433.0	394.3	346.6	315.1	298.0
42.5°	398.8	361.9	315.1	278.2	262.0
45°	366.4	327.7	282.7	244.0	225.9
47.5°	331.3	295.3	251.2	211.5	198.9
50°	295.3	262.0	220.5	184.5	178.2
52.5°	260.2	232.2	189.9	166.5	163.8
55°	224.1	200.7	164.7	150.3	145.8
57.5°	190.8	173.7	141.3	134.1	132.3
60°	159.3	144.9	125.1	120.6	117.9
62.5°	128.7	120.6	108.9	107.1	105.3
65°	102.6	99.0	93.6	93.6	92.7
67.5°	81.0	81.0	80.1	81.9	81.0
70°	64.8	65.7	67.5	69.3	70.2
72.5°	51.3	54.0	55.8	58.5	59.4
75°	39.6	42.3	45.9	47.7	49.5
77.5°	28.8	31.5	35.1	37.8	39.6
80°	19.8	21.6	25.2	28.8	30.6
82.5°	12.6	13.5	16.2	19.8	21.6
85°	5.4	6.3	8.1	11.7	13.5
87.5°	0.0	0.0	0.9	3.6	6.3
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	16.36	17.81	16.73	18.13	18.44	14.46	15.91	14.82	16.22	16.54
	3H	17.26	18.55	17.64	18.88	19.25	16.03	17.33	16.41	17.66	18.02
	4H	17.54	18.75	17.94	19.10	19.48	16.63	17.84	17.03	18.19	18.57
	6H	17.69	18.81	18.10	19.18	19.57	17.08	18.20	17.49	18.56	18.96
	8H	17.71	18.78	18.14	19.17	19.57	17.23	18.29	17.65	18.68	19.08
	12H	17.71	18.72	18.14	19.11	19.54	17.33	18.34	17.76	18.72	19.15
4H	2H	16.61	17.82	17.01	18.17	18.55	15.00	16.21	15.40	16.56	16.94
	3H	17.72	18.72	18.13	19.12	19.52	16.77	17.77	17.18	18.18	18.58
	4H	18.11	19.01	18.54	19.42	19.86	17.49	18.38	17.92	18.80	19.24
	6H	18.35	19.13	18.81	19.57	20.04	18.06	18.84	18.52	19.28	19.74
	8H	18.39	19.12	18.86	19.57	20.03	18.25	18.98	18.71	19.42	19.89
	12H	18.40	19.05	18.89	19.53	20.00	18.39	19.03	18.87	19.51	19.99
8H	4H	18.27	18.99	18.73	19.44	19.91	17.69	18.42	18.16	18.87	19.34
	6H	18.58	19.18	19.08	19.67	20.15	18.37	18.97	18.87	19.46	19.94
	8H	18.66	19.19	19.17	19.70	20.19	18.63	19.16	19.14	19.68	20.17
	12H	18.69	19.16	19.20	19.66	20.22	18.84	19.31	19.35	19.80	20.37
12H	4H	18.27	18.92	18.75	19.40	19.87	17.69	18.34	18.18	18.82	19.29
	6H	18.59	19.13	19.11	19.64	20.13	18.38	18.92	18.90	19.43	19.92
	8H	18.71	19.18	19.22	19.68	20.24	18.68	19.16	19.19	19.65	20.22