

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: P1059408

Luminaire Tested: S123RDRP-S775D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059408  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S775D950-X4F0-XX-UDD-WVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

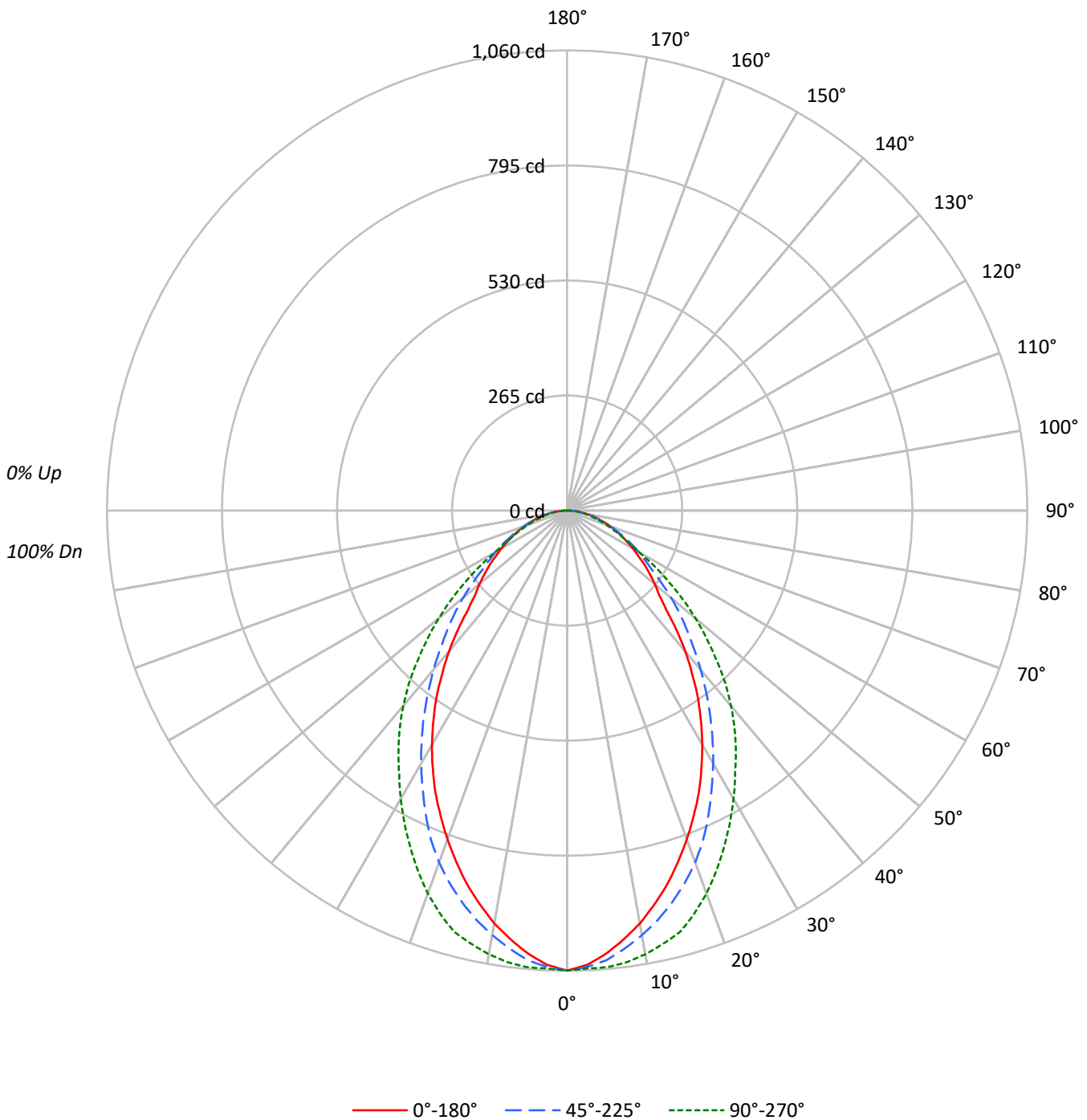
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1861.7 lumens  
Efficiency: N/A  
Efficacy: 72.2 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.1 / 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	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	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	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68					66				
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60					58				
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53					51				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48					46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43					41				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39					38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36					34				
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33					32				

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

	0°	45°	90°
0°	12441	12441	12441
5°	12080	12252	12445
10°	11512	11839	12372
15°	10829	11360	12214
20°	10072	10778	11724
25°	9296	9993	11080
30°	8443	9124	10397
35°	7516	8234	9710
40°	6486	7338	9001
45°	5361	6495	8071
50°	4814	5729	7046
55°	4461	4891	5843
60°	4112	4453	4476
65°	3826	4029	3748
70°	3601	3663	3286
75°	3394	3267	2895
80°	3205	2962	2712
85°	3072	3314	3072

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8071 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.1	5.3
10°-20°	264.4	14.2
20°-30°	357.6	19.2
30°-40°	367.5	19.7
40°-50°	308.6	16.6
50°-60°	221.3	11.9
60°-70°	140.9	7.6
70°-80°	77.4	4.2
80°-90°	25.8	1.4
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°	720.1	38.7
0°-40°	1087.6	58.4
0°-60°	1617.6	86.9
0°-90°	1861.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1861.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1025	1043	1039	1047	1056	96
15°	891	915	934	975	1005	250
25°	718	745	771	813	855	329
35°	524	552	574	626	677	326
45°	323	351	391	448	486	255
55°	218	222	239	271	285	195
65°	138	146	145	137	135	137
75°	75	82	72	67	64	80
85°	23	24	25	26	23	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1059.5	1059.5	1059.5	1059.5	1059.5
2.5°	1047.6	1062.2	1052.2	1053.1	1055.8
5°	1024.8	1043.0	1039.4	1046.7	1055.8
7.5°	996.5	1016.6	1017.5	1034.8	1049.4
10°	965.5	986.5	992.9	1019.3	1037.6
12.5°	929.1	951.9	965.5	998.4	1022.1
15°	890.8	915.4	934.5	974.7	1004.7
17.5°	848.8	875.3	899.9	942.8	973.7
20°	806.0	834.3	862.5	902.6	938.2
22.5°	761.3	790.5	819.7	858.9	898.1
25°	717.5	744.9	771.3	813.3	855.2
27.5°	670.1	698.4	721.2	767.7	811.5
30°	622.7	651.0	672.9	721.2	766.8
32.5°	573.5	602.7	622.7	672.9	720.3
35°	524.3	552.5	574.4	625.5	677.4
37.5°	472.3	503.3	525.2	582.6	633.7
40°	423.1	452.2	478.7	538.8	587.2
42.5°	372.0	402.1	432.2	494.2	538.8
45°	322.8	351.0	391.1	447.7	486.0
47.5°	287.2	305.4	351.9	399.3	435.8
50°	263.5	270.8	313.6	355.6	385.7
52.5°	239.8	245.3	274.4	312.7	335.5
55°	217.9	222.5	238.9	270.8	285.4
57.5°	194.2	198.8	212.4	230.7	238.9
60°	175.1	178.7	189.6	192.4	190.6
62.5°	155.9	161.4	166.9	160.5	157.7
65°	137.7	145.9	145.0	136.8	134.9
67.5°	121.3	129.5	124.9	116.7	114.0
70°	104.9	113.1	106.7	98.5	95.7
72.5°	89.4	98.5	88.4	81.1	79.3
75°	74.8	82.1	72.0	66.6	63.8
77.5°	61.1	66.6	57.4	52.9	51.1
80°	47.4	51.1	43.8	41.0	40.1
82.5°	34.6	36.5	31.9	33.7	32.8
85°	22.8	23.7	24.6	25.5	22.8
87.5°	10.9	15.5	15.5	14.6	11.9
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	15.94	17.41	16.31	17.72	18.04	17.01	18.48	17.38	18.79	19.10
	3H	17.64	18.95	18.02	19.28	19.64	18.10	19.41	18.48	19.74	20.10
	4H	18.30	19.52	18.70	19.87	20.25	18.50	19.73	18.90	20.08	20.46
	6H	18.80	19.93	19.21	20.30	20.69	18.81	19.94	19.22	20.31	20.70
	8H	18.97	20.05	19.40	20.44	20.84	18.94	20.02	19.37	20.41	20.81
	12H	19.10	20.13	19.53	20.51	20.94	19.06	20.10	19.50	20.48	20.91
4H	2H	16.55	17.77	16.95	18.12	18.50	17.42	18.65	17.82	18.99	19.37
	3H	18.47	19.49	18.89	19.89	20.29	18.74	19.75	19.15	20.15	20.56
	4H	19.29	20.20	19.72	20.62	21.06	19.25	20.17	19.69	20.59	21.03
	6H	19.93	20.73	20.39	21.17	21.64	19.69	20.48	20.15	20.93	21.39
	8H	20.16	20.90	20.62	21.35	21.81	19.88	20.62	20.34	21.07	21.53
	12H	20.33	20.99	20.81	21.47	21.94	20.06	20.72	20.54	21.20	21.67
8H	4H	19.52	20.27	19.99	20.71	21.18	19.50	20.24	19.96	20.69	21.16
	6H	20.31	20.93	20.81	21.42	21.90	20.05	20.66	20.55	21.16	21.63
	8H	20.62	21.18	21.14	21.69	22.18	20.32	20.88	20.84	21.39	21.88
	12H	20.89	21.38	21.40	21.87	22.44	20.62	21.10	21.13	21.60	22.16
12H	4H	19.53	20.20	20.02	20.68	21.15	19.53	20.19	20.01	20.67	21.14
	6H	20.35	20.90	20.86	21.41	21.90	20.10	20.65	20.62	21.16	21.65
	8H	20.72	21.21	21.23	21.70	22.27	20.44	20.93	20.95	21.42	21.99