

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: P1057833

Luminaire Tested: S122RDRP-S1005D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057833  
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-S1005D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

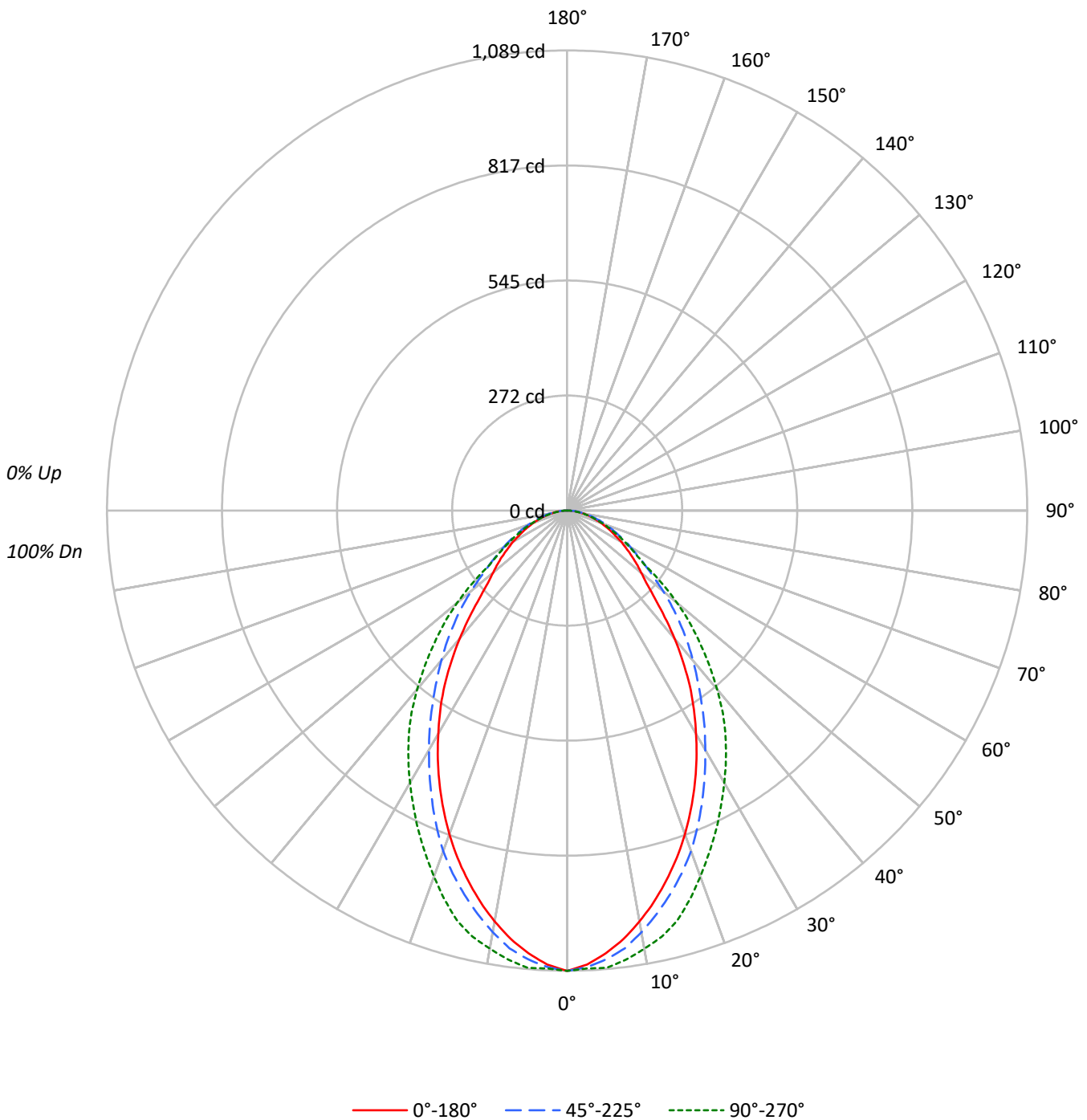
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1775.9 lumens  
Efficiency: N/A  
Efficacy: 42.5 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): 41.8  
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	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	39	35	46	39	35	45	39	35	44	38	34	33

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

	0°	45°	90°
0°	20100	20100	20100
5°	19482	19744	20112
10°	18501	18984	19730
15°	17319	17967	19199
20°	16008	16837	18101
25°	14547	15406	16980
30°	13002	13926	15848
35°	11398	12480	14723
40°	9536	11146	13289
45°	7641	9872	11615
50°	6557	8506	9752
55°	5990	7235	7197
60°	5447	6399	6266
65°	4960	5728	5471
70°	4548	5244	4866
75°	4256	4841	4256
80°	3985	4484	3730
85°	3959	4721	3218

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11615 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.5	5.7
10°-20°	266.2	15.0
20°-30°	351.1	19.8
30°-40°	353.6	19.9
40°-50°	287.8	16.2
50°-60°	196.2	11.0
60°-70°	127.4	7.2
70°-80°	70.1	3.9
80°-90°	22.9	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°	717.9	40.4
0°-40°	1071.5	60.3
0°-60°	1555.5	87.6
0°-90°	1775.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1775.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1052	1072	1066	1075	1086	98
15°	907	930	940	979	1005	254
25°	714	738	757	791	834	328
35°	506	532	554	602	654	314
45°	293	329	378	411	445	231
55°	186	205	225	226	224	167
65°	114	135	131	124	125	113
75°	60	74	68	61	60	63
85°	19	25	22	18	15	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1089.3	1089.3	1089.3	1089.3	1089.3
2.5°	1075.2	1092.8	1081.1	1082.3	1084.6
5°	1051.8	1071.7	1065.9	1075.2	1085.8
7.5°	1022.5	1042.4	1044.8	1058.8	1071.7
10°	987.4	1009.7	1013.2	1034.3	1053.0
12.5°	948.7	973.3	978.0	1008.5	1033.1
15°	906.6	930.0	940.5	979.2	1005.0
17.5°	862.1	884.3	900.7	935.9	965.1
20°	815.2	836.3	857.4	889.0	921.8
22.5°	764.9	788.3	808.2	839.8	877.3
25°	714.5	737.9	756.7	790.6	834.0
27.5°	663.0	686.4	705.1	741.4	788.3
30°	610.2	634.8	653.6	694.6	743.8
32.5°	558.7	583.3	604.4	647.7	699.3
35°	506.0	531.8	554.0	602.0	653.6
37.5°	449.8	479.1	507.2	555.2	605.6
40°	395.9	428.7	462.7	507.2	551.7
42.5°	342.0	378.3	420.5	458.0	499.0
45°	292.8	329.1	378.3	411.1	445.1
47.5°	254.2	284.6	337.3	364.3	394.7
50°	228.4	249.5	296.3	317.4	339.7
52.5°	207.3	224.9	257.7	271.7	283.5
55°	186.2	205.0	224.9	226.1	223.7
57.5°	165.2	186.2	196.8	188.6	193.3
60°	147.6	168.7	173.4	165.2	169.8
62.5°	128.8	152.3	152.3	144.1	146.4
65°	113.6	134.7	131.2	124.2	125.3
67.5°	98.4	119.5	113.6	106.6	106.6
70°	84.3	104.2	97.2	90.2	90.2
72.5°	71.4	87.8	83.2	75.0	73.8
75°	59.7	73.8	67.9	60.9	59.7
77.5°	48.0	59.7	55.1	49.2	46.9
80°	37.5	48.0	42.2	37.5	35.1
82.5°	28.1	36.3	31.6	26.9	24.6
85°	18.7	24.6	22.3	17.6	15.2
87.5°	9.4	16.4	14.1	11.7	9.4
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	17.14	18.58	17.51	18.90	19.21	17.39	18.83	17.76	19.14	19.46
	3H	18.67	19.96	19.05	20.29	20.65	18.75	20.04	19.13	20.37	20.73
	4H	19.23	20.44	19.63	20.79	21.17	19.23	20.44	19.63	20.79	21.17
	6H	19.66	20.77	20.07	21.14	21.53	19.58	20.69	19.99	21.06	21.45
	8H	19.81	20.87	20.24	21.26	21.66	19.69	20.75	20.12	21.14	21.54
	12H	19.92	20.93	20.35	21.32	21.75	19.76	20.77	20.19	21.15	21.58
4H	2H	17.72	18.92	18.12	19.27	19.65	17.92	19.12	18.32	19.47	19.85
	3H	19.52	20.52	19.93	20.92	21.32	19.49	20.49	19.90	20.89	21.29
	4H	20.26	21.16	20.69	21.58	22.02	20.08	20.98	20.52	21.40	21.84
	6H	20.85	21.63	21.31	22.07	22.53	20.55	21.33	21.01	21.78	22.24
	8H	21.06	21.79	21.52	22.23	22.70	20.70	21.43	21.17	21.88	22.35
	12H	21.22	21.87	21.71	22.35	22.82	20.81	21.46	21.30	21.94	22.41
8H	4H	20.53	21.26	20.99	21.70	22.17	20.38	21.10	20.84	21.55	22.02
	6H	21.28	21.88	21.78	22.38	22.86	20.97	21.57	21.46	22.06	22.54
	8H	21.61	22.15	22.12	22.66	23.15	21.19	21.73	21.70	22.24	22.73
	12H	21.89	22.37	22.40	22.86	23.43	21.37	21.85	21.88	22.34	22.91
12H	4H	20.54	21.19	21.02	21.67	22.14	20.41	21.06	20.89	21.54	22.01
	6H	21.33	21.87	21.84	22.38	22.87	21.03	21.57	21.55	22.09	22.58
	8H	21.72	22.20	22.24	22.69	23.26	21.32	21.80	21.83	22.29	22.86