

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: P1057860

Luminaire Tested: S122RDRP-S1005D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057860
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-S1005D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

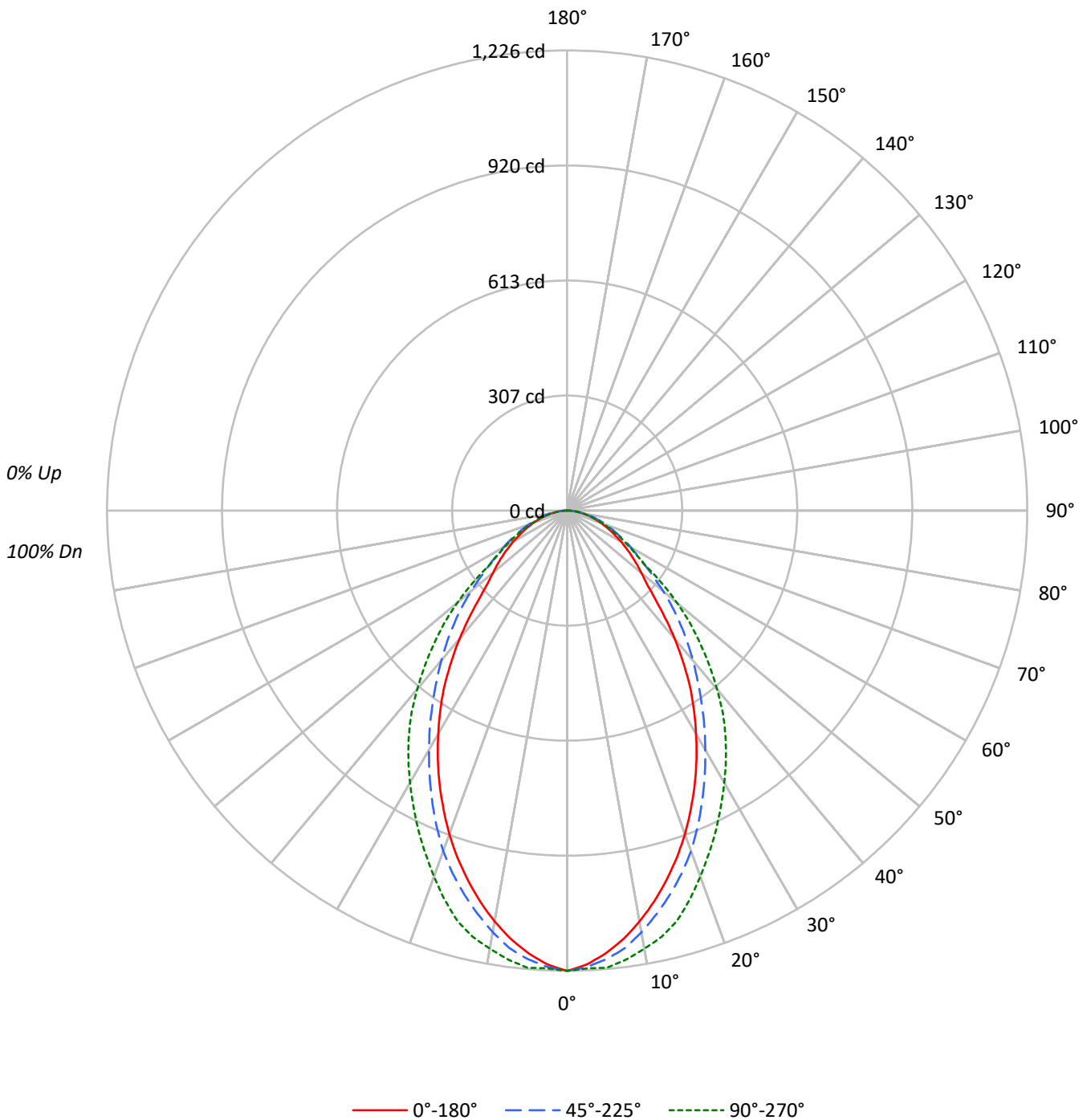
Lumens per Lamp: N/A
Luminaire Lumens: 1999.0 lumens
Efficiency: N/A
Efficacy: 47.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{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	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°	22626	22626	22626
5°	21931	22224	22639
10°	20826	21370	22209
15°	19495	20225	21610
20°	18019	18951	20375
25°	16376	17341	19112
30°	14636	15676	17838
35°	12831	14047	16573
40°	10734	12545	14959
45°	8601	11114	13074
50°	7381	9577	10978
55°	6743	8142	8101
60°	6130	7200	7056
65°	5584	6449	6161
70°	5120	5902	5476
75°	4791	5454	4791
80°	4484	5048	4208
85°	4467	5314	3620

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13074 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	5.7
10°-20°	299.7	15.0
20°-30°	395.3	19.8
30°-40°	398.0	19.9
40°-50°	323.9	16.2
50°-60°	220.9	11.0
60°-70°	143.4	7.2
70°-80°	79.0	3.9
80°-90°	25.8	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
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0°-30°	808.1	40.4
0°-40°	1206.1	60.3
0°-60°	1750.9	87.6
0°-90°	1999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1999.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1184	1206	1200	1210	1222	111
15°	1020	1047	1059	1102	1131	286
25°	804	831	852	890	939	369
35°	570	599	624	678	736	354
45°	330	370	426	463	501	260
55°	210	231	253	254	252	188
65°	128	152	148	140	141	127
75°	67	83	76	69	67	71
85°	21	28	25	20	17	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1226.2	1226.2	1226.2	1226.2	1226.2
2.5°	1210.3	1230.1	1216.9	1218.2	1220.9
5°	1184.0	1206.4	1199.8	1210.3	1222.2
7.5°	1151.0	1173.4	1176.1	1191.9	1206.4
10°	1111.5	1136.5	1140.5	1164.2	1185.3
12.5°	1067.9	1095.6	1100.9	1135.2	1162.9
15°	1020.5	1046.9	1058.7	1102.2	1131.2
17.5°	970.4	995.4	1013.9	1053.4	1086.4
20°	917.6	941.4	965.1	1000.7	1037.6
22.5°	860.9	887.3	909.7	945.3	987.5
25°	804.3	830.6	851.7	890.0	938.7
27.5°	746.2	772.6	793.7	834.6	887.3
30°	686.9	714.6	735.7	781.8	837.2
32.5°	628.9	656.6	680.3	729.1	787.1
35°	569.6	598.6	623.6	677.7	735.7
37.5°	506.3	539.2	570.9	624.9	681.6
40°	445.6	482.6	520.8	570.9	621.0
42.5°	385.0	425.9	473.3	515.5	561.7
45°	329.6	370.5	425.9	462.8	501.0
47.5°	286.1	320.4	379.7	410.0	444.3
50°	257.1	280.8	333.6	357.3	382.4
52.5°	233.4	253.1	290.1	305.9	319.1
55°	209.6	230.7	253.1	254.5	251.8
57.5°	185.9	209.6	221.5	212.3	217.5
60°	166.1	189.9	195.1	185.9	191.2
62.5°	145.0	171.4	171.4	162.2	164.8
65°	127.9	151.6	147.7	139.8	141.1
67.5°	110.7	134.5	127.9	120.0	120.0
70°	94.9	117.3	109.4	101.5	101.5
72.5°	80.4	98.9	93.6	84.4	83.1
75°	67.2	83.1	76.5	68.6	67.2
77.5°	54.1	67.2	62.0	55.4	52.7
80°	42.2	54.1	47.5	42.2	39.6
82.5°	31.6	40.9	35.6	30.3	27.7
85°	21.1	27.7	25.1	19.8	17.1
87.5°	10.5	18.5	15.8	13.2	10.5
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	17.56	18.99	17.92	19.31	19.62	17.80	19.24	18.17	19.55	19.87
	3H	19.08	20.37	19.46	20.70	21.06	19.16	20.45	19.54	20.78	21.14
	4H	19.64	20.85	20.05	21.20	21.58	19.64	20.85	20.04	21.20	21.58
	6H	20.07	21.18	20.48	21.55	21.94	19.99	21.10	20.40	21.47	21.86
	8H	20.22	21.28	20.65	21.67	22.07	20.10	21.16	20.53	21.55	21.95
	12H	20.33	21.35	20.77	21.73	22.16	20.17	21.18	20.60	21.56	21.99
4H	2H	18.13	19.33	18.53	19.68	20.06	18.33	19.53	18.73	19.88	20.26
	3H	19.93	20.93	20.34	21.33	21.73	19.90	20.90	20.31	21.30	21.70
	4H	20.67	21.57	21.11	21.99	22.43	20.50	21.39	20.93	21.81	22.25
	6H	21.26	22.04	21.72	22.48	22.95	20.96	21.74	21.42	22.19	22.65
	8H	21.47	22.20	21.94	22.64	23.11	21.11	21.84	21.58	22.29	22.76
	12H	21.64	22.28	22.12	22.76	23.24	21.22	21.87	21.71	22.35	22.82
8H	4H	20.94	21.67	21.40	22.11	22.58	20.79	21.52	21.25	21.96	22.43
	6H	21.69	22.30	22.19	22.79	23.27	21.38	21.98	21.88	22.47	22.95
	8H	22.02	22.56	22.54	23.07	23.56	21.60	22.14	22.12	22.65	23.14
	12H	22.30	22.78	22.81	23.27	23.84	21.78	22.26	22.29	22.75	23.32
12H	4H	20.95	21.60	21.44	22.08	22.55	20.82	21.47	21.30	21.95	22.42
	6H	21.74	22.28	22.26	22.79	23.28	21.44	21.99	21.96	22.50	22.99
	8H	22.14	22.61	22.65	23.11	23.67	21.73	22.21	22.24	22.70	23.27