

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: P1057806

Luminaire Tested: S122RDRP-S1005D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057806
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-S1005D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

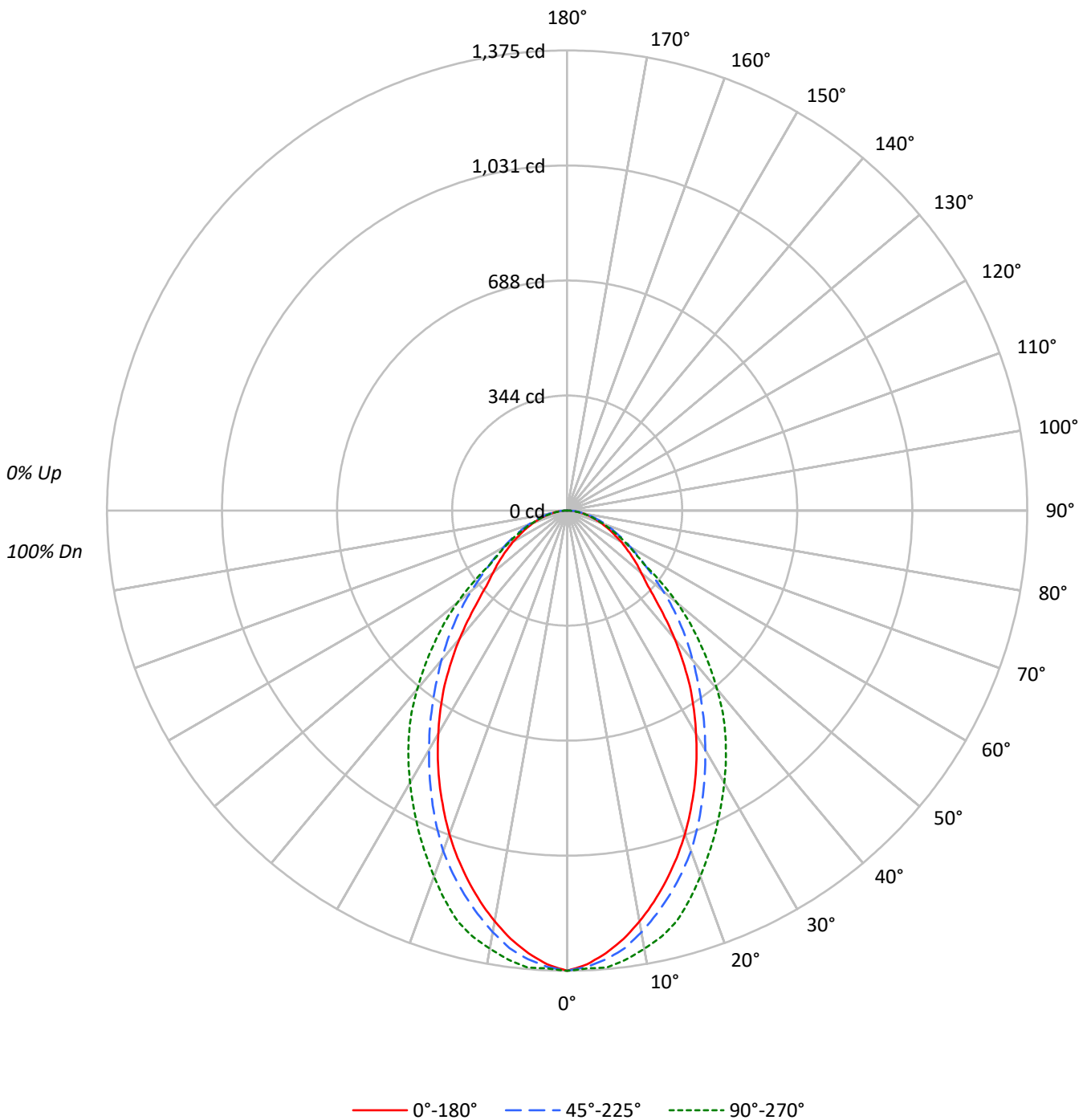
Lumens per Lamp: N/A
Luminaire Lumens: 2241.7 lumens
Efficiency: N/A
Efficacy: 53.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): 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	100	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°	25374	25374	25374
5°	24595	24923	25388
10°	23354	23965	24905
15°	21862	22681	24235
20°	20208	21253	22849
25°	18363	19448	21433
30°	16413	17578	20005
35°	14388	15755	18584
40°	12039	14067	16775
45°	9645	12463	14663
50°	8276	10739	12310
55°	7563	9133	9085
60°	6875	8075	7912
65°	6261	7230	6907
70°	5746	6620	6140
75°	5376	6117	5376
80°	5026	5653	4718
85°	5018	5949	4065

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14663 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	5.7
10°-20°	336.1	15.0
20°-30°	443.3	19.8
30°-40°	446.3	19.9
40°-50°	363.3	16.2
50°-60°	247.7	11.0
60°-70°	160.8	7.2
70°-80°	88.5	3.9
80°-90°	28.9	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°	906.2	40.4
0°-40°	1352.6	60.3
0°-60°	1963.5	87.6
0°-90°	2241.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2241.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1328	1353	1346	1357	1371	124
15°	1144	1174	1187	1236	1269	321
25°	902	932	955	998	1053	414
35°	639	671	699	760	825	397
45°	370	416	478	519	562	291
55°	235	259	284	285	282	211
65°	143	170	166	157	158	143
75°	75	93	86	77	75	80
85°	24	31	28	22	19	26
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1375.1	1375.1	1375.1	1375.1	1375.1
2.5°	1357.3	1379.5	1364.7	1366.2	1369.2
5°	1327.8	1352.9	1345.5	1357.3	1370.6
7.5°	1290.8	1315.9	1318.9	1336.6	1352.9
10°	1246.4	1274.5	1279.0	1305.6	1329.2
12.5°	1197.6	1228.7	1234.6	1273.0	1304.1
15°	1144.4	1174.0	1187.3	1236.1	1268.6
17.5°	1088.2	1116.3	1137.0	1181.4	1218.3
20°	1029.1	1055.7	1082.3	1122.2	1163.6
22.5°	965.5	995.1	1020.2	1060.1	1107.4
25°	901.9	931.5	955.2	998.0	1052.7
27.5°	836.9	866.4	890.1	935.9	995.1
30°	770.3	801.4	825.0	876.8	938.9
32.5°	705.3	736.3	762.9	817.6	882.7
35°	638.7	671.3	699.4	760.0	825.0
37.5°	567.8	604.7	640.2	700.8	764.4
40°	499.8	541.2	584.0	640.2	696.4
42.5°	431.7	477.6	530.8	578.1	629.9
45°	369.6	415.5	477.6	519.0	561.9
47.5°	320.8	359.3	425.8	459.8	498.3
50°	288.3	314.9	374.1	400.7	428.8
52.5°	261.7	283.9	325.3	343.0	357.8
55°	235.1	258.7	283.9	285.4	282.4
57.5°	208.5	235.1	248.4	238.0	244.0
60°	186.3	212.9	218.8	208.5	214.4
62.5°	162.6	192.2	192.2	181.9	184.8
65°	143.4	170.0	165.6	156.7	158.2
67.5°	124.2	150.8	143.4	134.5	134.5
70°	106.5	131.6	122.7	113.8	113.8
72.5°	90.2	110.9	105.0	94.6	93.1
75°	75.4	93.1	85.8	76.9	75.4
77.5°	60.6	75.4	69.5	62.1	59.1
80°	47.3	60.6	53.2	47.3	44.4
82.5°	35.5	45.8	39.9	34.0	31.0
85°	23.7	31.0	28.1	22.2	19.2
87.5°	11.8	20.7	17.7	14.8	11.8
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	17.95	19.39	18.32	19.71	20.02	18.20	19.64	18.57	19.95	20.27
	3H	19.48	20.77	19.86	21.10	21.46	19.56	20.84	19.94	21.17	21.54
	4H	20.04	21.25	20.45	21.60	21.98	20.04	21.24	20.44	21.59	21.97
	6H	20.47	21.58	20.88	21.95	22.34	20.39	21.50	20.80	21.87	22.26
	8H	20.62	21.68	21.05	22.07	22.47	20.50	21.55	20.92	21.94	22.35
	12H	20.73	21.75	21.17	22.13	22.56	20.56	21.58	21.00	21.96	22.39
4H	2H	18.53	19.73	18.93	20.08	20.46	18.72	19.93	19.12	20.28	20.66
	3H	20.33	21.33	20.74	21.73	22.13	20.30	21.30	20.71	21.70	22.10
	4H	21.07	21.97	21.51	22.39	22.83	20.89	21.79	21.33	22.21	22.65
	6H	21.66	22.44	22.12	22.88	23.34	21.36	22.14	21.82	22.59	23.05
	8H	21.87	22.60	22.33	23.04	23.51	21.51	22.24	21.98	22.69	23.15
	12H	22.03	22.68	22.52	23.16	23.63	21.62	22.27	22.10	22.75	23.22
8H	4H	21.34	22.07	21.80	22.51	22.98	21.18	21.91	21.65	22.36	22.83
	6H	22.09	22.69	22.59	23.19	23.66	21.77	22.37	22.27	22.87	23.35
	8H	22.42	22.96	22.93	23.47	23.96	22.00	22.53	22.51	23.05	23.54
	12H	22.70	23.18	23.21	23.67	24.24	22.18	22.66	22.69	23.15	23.72
12H	4H	21.35	22.00	21.83	22.48	22.95	21.22	21.87	21.70	22.35	22.82
	6H	22.14	22.68	22.65	23.19	23.68	21.84	22.38	22.36	22.89	23.38
	8H	22.53	23.01	23.05	23.50	24.07	22.13	22.60	22.64	23.10	23.66