

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: P1059147

Luminaire Tested: S123RDRP-S1165D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059147
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-S1165D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

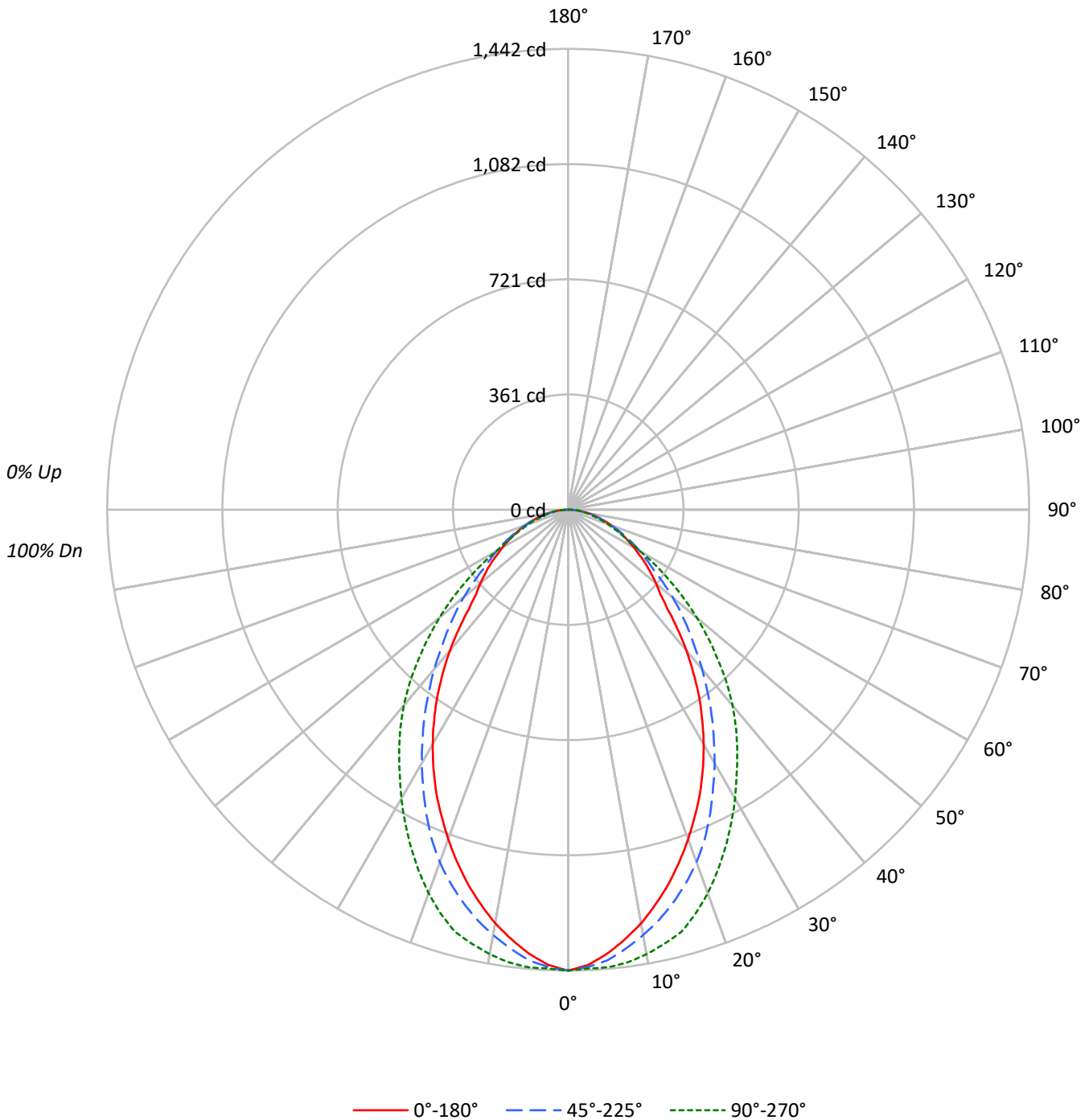
Lumens per Lamp: N/A
Luminaire Lumens: 2533.9 lumens
Efficiency: N/A
Efficacy: 60.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	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°	16934	16934	16934
5°	16442	16677	16940
10°	15670	16115	16840
15°	14740	15463	16625
20°	13709	14670	15957
25°	12654	13603	15082
30°	11493	12419	14152
35°	10229	11207	13218
40°	8826	9987	12251
45°	7295	8841	10985
50°	6553	7799	9589
55°	6072	6656	7951
60°	5596	6061	6092
65°	5207	5482	5104
70°	4899	4985	4474
75°	4619	4446	3943
80°	4362	4030	3692
85°	4177	4513	4177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10985 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	5.3
10°-20°	359.8	14.2
20°-30°	486.8	19.2
30°-40°	500.2	19.7
40°-50°	420.1	16.6
50°-60°	301.2	11.9
60°-70°	191.8	7.6
70°-80°	105.4	4.2
80°-90°	35.1	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°	980.2	38.7
0°-40°	1480.4	58.4
0°-60°	2201.7	86.9
0°-90°	2533.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2533.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1442	1442	1442	1442	1442	
5°	1395	1420	1415	1425	1437	131
15°	1212	1246	1272	1327	1368	340
25°	977	1014	1050	1107	1164	448
35°	714	752	782	851	922	444
45°	439	478	532	609	662	347
55°	297	303	325	369	388	265
65°	187	199	197	186	184	187
75°	102	112	98	91	87	108
85°	31	32	34	35	31	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1442.1	1442.1	1442.1	1442.1	1442.1
2.5°	1425.9	1445.8	1432.1	1433.4	1437.1
5°	1394.9	1419.7	1414.8	1424.7	1437.1
7.5°	1356.4	1383.7	1385.0	1408.5	1428.4
10°	1314.2	1342.8	1351.5	1387.4	1412.3
12.5°	1264.6	1295.6	1314.2	1358.9	1391.2
15°	1212.5	1246.0	1272.0	1326.6	1367.6
17.5°	1155.4	1191.4	1224.9	1283.2	1325.4
20°	1097.1	1135.5	1174.0	1228.6	1277.0
22.5°	1036.2	1076.0	1115.7	1169.0	1222.4
25°	976.7	1013.9	1049.9	1107.0	1164.1
27.5°	912.1	950.6	981.6	1044.9	1104.5
30°	847.6	886.1	915.9	981.6	1043.7
32.5°	780.6	820.3	847.6	915.9	980.4
35°	713.6	752.1	781.8	851.3	922.1
37.5°	642.8	685.0	714.8	793.0	862.5
40°	575.8	615.5	651.5	733.4	799.2
42.5°	506.3	547.3	588.2	672.6	733.4
45°	439.3	477.8	532.4	609.3	661.5
47.5°	390.9	415.7	479.0	543.6	593.2
50°	358.7	368.6	426.9	484.0	524.9
52.5°	326.4	333.8	373.5	425.7	456.7
55°	296.6	302.8	325.1	368.6	388.4
57.5°	264.3	270.5	289.2	314.0	325.1
60°	238.3	243.2	258.1	261.9	259.4
62.5°	212.2	219.7	227.1	218.4	214.7
65°	187.4	198.6	197.3	186.2	183.7
67.5°	165.1	176.2	170.0	158.8	155.1
70°	142.7	153.9	145.2	134.0	130.3
72.5°	121.6	134.0	120.4	110.4	108.0
75°	101.8	111.7	98.0	90.6	86.9
77.5°	83.1	90.6	78.2	72.0	69.5
80°	64.5	69.5	59.6	55.8	54.6
82.5°	47.2	49.6	43.4	45.9	44.7
85°	31.0	32.3	33.5	34.7	31.0
87.5°	14.9	21.1	21.1	19.9	16.1
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	17.01	18.48	17.38	18.79	19.10	18.08	19.55	18.45	19.86	20.18
	3H	18.71	20.02	19.09	20.35	20.71	19.17	20.48	19.55	20.81	21.17
	4H	19.37	20.59	19.77	20.94	21.32	19.57	20.80	19.97	21.15	21.53
	6H	19.87	21.00	20.28	21.37	21.76	19.88	21.01	20.29	21.38	21.77
	8H	20.04	21.12	20.47	21.51	21.91	20.02	21.09	20.44	21.48	21.89
	12H	20.17	21.20	20.60	21.58	22.01	20.14	21.17	20.57	21.55	21.98
4H	2H	17.62	18.84	18.02	19.19	19.57	18.49	19.72	18.89	20.06	20.44
	3H	19.54	20.56	19.95	20.96	21.36	19.81	20.82	20.22	21.22	21.63
	4H	20.36	21.27	20.79	21.69	22.13	20.32	21.24	20.76	21.66	22.10
	6H	21.00	21.80	21.46	22.24	22.70	20.76	21.55	21.22	22.00	22.46
	8H	21.22	21.97	21.69	22.41	22.88	20.95	21.69	21.41	22.14	22.60
	12H	21.40	22.06	21.88	22.54	23.01	21.13	21.79	21.61	22.27	22.75
8H	4H	20.59	21.34	21.06	21.78	22.25	20.57	21.31	21.04	21.76	22.23
	6H	21.38	22.00	21.88	22.49	22.97	21.12	21.73	21.62	22.23	22.70
	8H	21.69	22.25	22.21	22.76	23.25	21.39	21.95	21.91	22.46	22.95
	12H	21.96	22.45	22.47	22.94	23.51	21.69	22.18	22.20	22.67	23.23
12H	4H	20.60	21.27	21.09	21.75	22.22	20.60	21.26	21.08	21.74	22.21
	6H	21.41	21.97	21.93	22.48	22.97	21.17	21.72	21.69	22.23	22.72
	8H	21.79	22.28	22.30	22.77	23.34	21.51	22.00	22.02	22.49	23.06