

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: P1056384

Luminaire Tested: S125R3DRP-S1090D950-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DRP-S1090D950-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

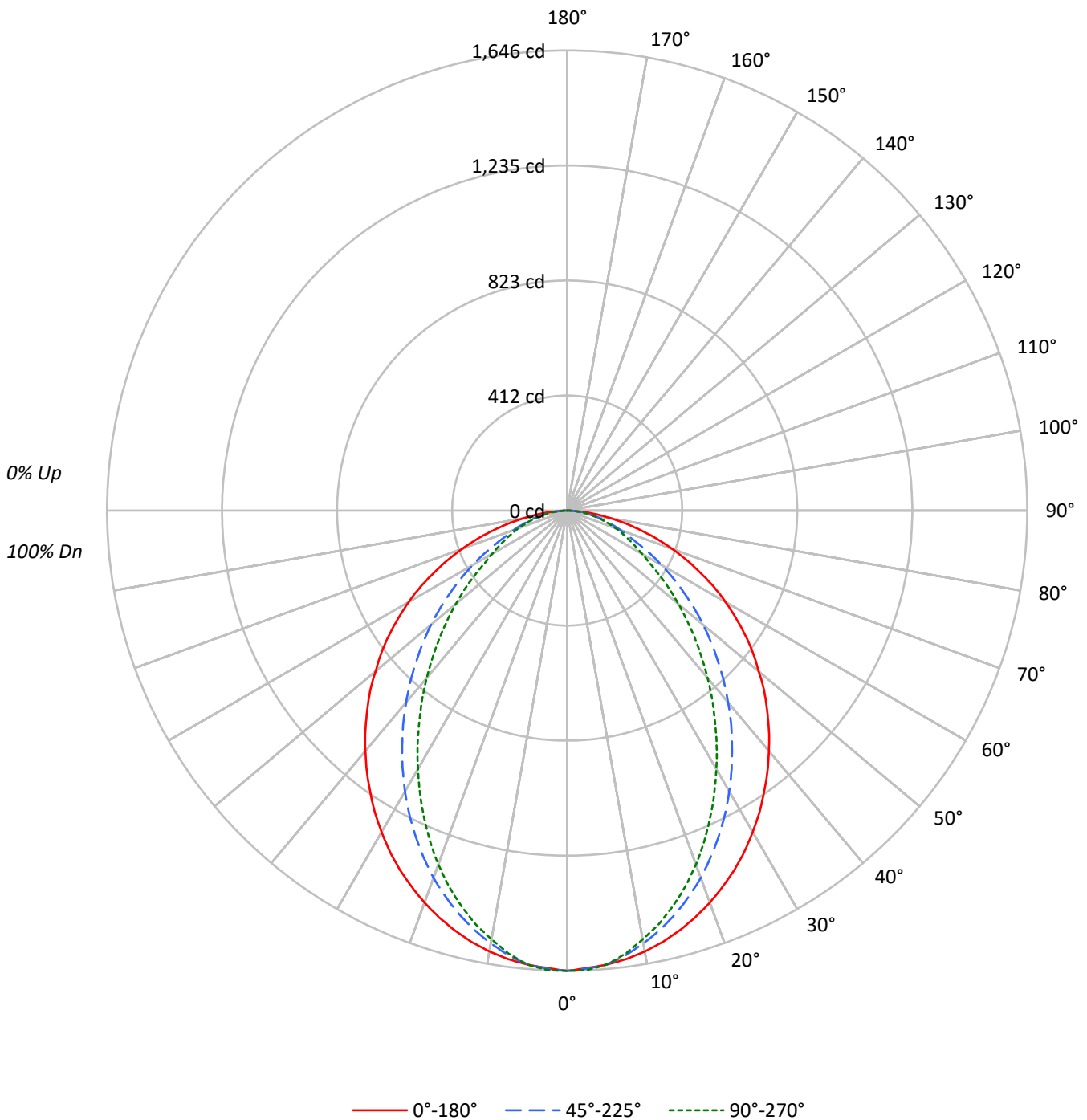
Lumens per Lamp: N/A
Luminaire Lumens: 3489.6 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11640	11640	11640
5°	11571	11562	11571
10°	11493	11282	11177
15°	11377	10937	10713
20°	11224	10514	10136
25°	11054	10012	9448
30°	10838	9467	8716
35°	10601	8877	7956
40°	10363	8270	7206
45°	10112	7636	6459
50°	9842	6984	5717
55°	9595	6271	4971
60°	9257	5513	4367
65°	8797	4675	4060
70°	8262	4181	3801
75°	7468	3851	3584
80°	6489	3493	3342
85°	5069	3082	3082

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10112 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.0	4.4
10°-20°	423.0	12.1
20°-30°	597.5	17.1
30°-40°	657.8	18.8
40°-50°	613.6	17.6
50°-60°	489.8	14.0
60°-70°	329.6	9.4
70°-80°	175.6	5.0
80°-90°	48.8	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°	1174.5	33.7
0°-40°	1832.3	52.5
0°-60°	2935.7	84.1
0°-90°	3489.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3489.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1630	1644	1629	1624	1630	155
15°	1554	1546	1494	1469	1464	438
25°	1417	1374	1284	1227	1211	652
35°	1228	1156	1029	948	922	769
45°	1011	916	764	671	646	781
55°	778	661	509	428	403	695
65°	526	411	280	248	243	522
75°	273	181	141	132	131	291
85°	62	43	38	39	38	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1646.5	1646.5	1646.5	1646.5	1646.5
2.5°	1637.9	1651.4	1640.3	1642.8	1645.2
5°	1630.5	1644.0	1629.3	1624.4	1630.5
7.5°	1618.3	1629.3	1604.8	1593.7	1598.6
10°	1601.1	1608.4	1571.7	1557.0	1557.0
12.5°	1580.3	1580.3	1536.1	1515.3	1515.3
15°	1554.5	1545.9	1494.4	1468.7	1463.8
17.5°	1525.1	1509.1	1447.8	1414.7	1408.6
20°	1492.0	1466.2	1397.6	1354.7	1347.3
22.5°	1455.2	1422.1	1342.4	1289.7	1281.1
25°	1417.2	1374.3	1283.6	1227.2	1211.2
27.5°	1374.3	1322.8	1223.5	1159.8	1140.1
30°	1327.7	1268.9	1159.8	1088.6	1067.8
32.5°	1279.9	1213.7	1094.8	1018.8	995.5
35°	1228.4	1156.1	1028.6	947.7	921.9
37.5°	1176.9	1098.5	963.6	879.0	852.0
40°	1123.0	1037.2	896.2	809.1	780.9
42.5°	1069.0	977.1	830.0	741.7	712.3
45°	1011.4	915.8	763.8	670.6	646.1
47.5°	956.2	853.3	698.8	608.1	581.1
50°	894.9	788.3	635.0	544.3	519.8
52.5°	838.6	724.5	571.3	486.7	461.0
55°	778.5	660.8	508.8	427.9	403.3
57.5°	716.0	597.0	448.7	372.7	349.4
60°	654.7	533.3	389.9	320.0	308.9
62.5°	592.1	473.2	334.7	280.7	273.4
65°	525.9	410.7	279.5	247.6	242.7
67.5°	463.4	350.6	235.4	217.0	212.1
70°	399.7	290.6	202.3	186.3	183.9
72.5°	337.1	232.9	170.4	159.4	156.9
75°	273.4	181.4	141.0	132.4	131.2
77.5°	214.5	136.1	111.6	107.9	105.4
80°	159.4	101.8	85.8	83.4	82.1
82.5°	109.1	69.9	61.3	61.3	58.8
85°	62.5	42.9	38.0	39.2	38.0
87.5°	23.3	18.4	17.2	18.4	18.4
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	19.82	21.36	20.18	21.67	21.98	16.20	17.74	16.56	18.05	18.37
	3H	21.60	22.98	21.98	23.31	23.67	17.67	19.06	18.05	19.39	19.75
	4H	22.25	23.55	22.65	23.90	24.28	18.26	19.56	18.66	19.91	20.29
	6H	22.73	23.93	23.14	24.30	24.69	18.73	19.93	19.14	20.29	20.69
	8H	22.88	24.03	23.31	24.42	24.82	18.89	20.03	19.31	20.42	20.82
	12H	22.98	24.08	23.41	24.46	24.89	19.00	20.10	19.43	20.48	20.91
4H	2H	19.95	21.25	20.35	21.60	21.98	16.87	18.17	17.27	18.52	18.90
	3H	21.92	23.00	22.33	23.40	23.80	18.55	19.63	18.96	20.03	20.43
	4H	22.67	23.64	23.10	24.05	24.49	19.25	20.23	19.69	20.64	21.08
	6H	23.26	24.11	23.72	24.55	25.01	19.84	20.69	20.30	21.13	21.59
	8H	23.47	24.26	23.93	24.70	25.17	20.05	20.84	20.51	21.29	21.75
	12H	23.61	24.32	24.10	24.80	25.27	20.21	20.92	20.69	21.40	21.87
8H	4H	22.73	23.52	23.19	23.97	24.43	19.62	20.41	20.08	20.86	21.32
	6H	23.39	24.04	23.88	24.54	25.01	20.32	20.98	20.82	21.47	21.94
	8H	23.64	24.23	24.16	24.74	25.23	20.61	21.19	21.12	21.70	22.19
	12H	23.85	24.37	24.36	24.86	25.43	20.85	21.37	21.36	21.86	22.42
12H	4H	22.72	23.43	23.20	23.91	24.38	19.67	20.38	20.15	20.85	21.32
	6H	23.38	23.97	23.90	24.48	24.97	20.39	20.98	20.91	21.49	21.98
	8H	23.68	24.20	24.19	24.69	25.25	20.74	21.26	21.24	21.75	22.31