

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: P1056399

Luminaire Tested: S125R3DR-S1270D927-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056399
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: S125R3DR-S1270D927-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

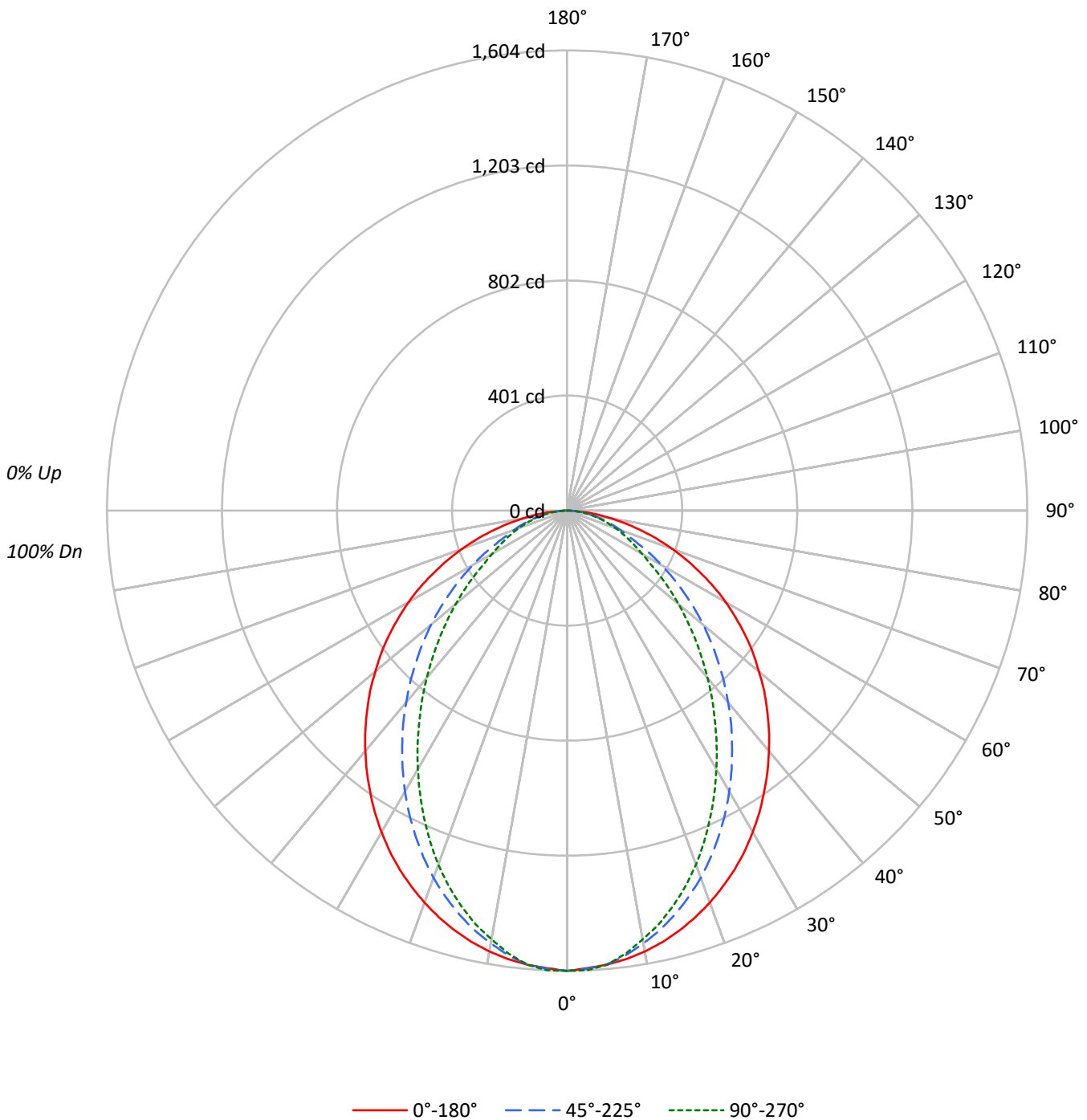
Lumens per Lamp: N/A
Luminaire Lumens: 3400.7 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	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					100			
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11343	11343	11343
5°	11276	11268	11276
10°	11200	10994	10892
15°	11087	10659	10440
20°	10938	10246	9878
25°	10773	9757	9207
30°	10562	9226	8494
35°	10331	8651	7753
40°	10100	8059	7023
45°	9855	7441	6294
50°	9592	6807	5572
55°	9351	6111	4845
60°	9020	5371	4257
65°	8573	4557	3958
70°	8051	4074	3704
75°	7276	3753	3491
80°	6322	3403	3257
85°	4940	3001	3001

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9855 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.1	4.4
10°-20°	412.2	12.1
20°-30°	582.3	17.1
30°-40°	641.0	18.8
40°-50°	597.9	17.6
50°-60°	477.3	14.0
60°-70°	321.2	9.4
70°-80°	171.1	5.0
80°-90°	47.5	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°	1144.6	33.7
0°-40°	1785.6	52.5
0°-60°	2860.9	84.1
0°-90°	3400.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3400.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1604	1604	1604	1604	1604	
5°	1589	1602	1588	1583	1589	151
15°	1515	1507	1456	1431	1426	427
25°	1381	1339	1251	1196	1180	636
35°	1197	1127	1002	924	898	749
45°	986	892	744	654	630	761
55°	759	644	496	417	393	677
65°	512	400	272	241	237	508
75°	266	177	137	129	128	284
85°	61	42	37	38	37	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1604.5	1604.5	1604.5	1604.5	1604.5
2.5°	1596.2	1609.3	1598.5	1600.9	1603.3
5°	1589.0	1602.1	1587.8	1583.0	1589.0
7.5°	1577.0	1587.8	1563.9	1553.2	1557.9
10°	1560.3	1567.5	1531.6	1517.3	1517.3
12.5°	1540.0	1540.0	1497.0	1476.7	1476.7
15°	1514.9	1506.6	1456.4	1431.3	1426.5
17.5°	1486.2	1470.7	1411.0	1378.7	1372.7
20°	1454.0	1428.9	1362.0	1320.2	1313.0
22.5°	1418.1	1385.9	1308.2	1256.9	1248.5
25°	1381.1	1339.3	1250.9	1195.9	1180.4
27.5°	1339.3	1289.1	1192.3	1130.2	1111.1
30°	1293.9	1236.5	1130.2	1060.9	1040.6
32.5°	1247.3	1182.8	1066.9	992.8	970.1
35°	1197.1	1126.6	1002.4	923.5	898.4
37.5°	1146.9	1070.5	939.1	856.6	830.3
40°	1094.4	1010.7	873.3	788.5	761.0
42.5°	1041.8	952.2	808.8	722.8	694.1
45°	985.7	892.5	744.3	653.5	629.6
47.5°	931.9	831.5	681.0	592.6	566.3
50°	872.2	768.2	618.9	530.5	506.6
52.5°	817.2	706.1	556.7	474.3	449.2
55°	758.7	644.0	495.8	417.0	393.1
57.5°	697.7	581.8	437.3	363.2	340.5
60°	638.0	519.7	379.9	311.8	301.1
62.5°	577.1	461.2	326.2	273.6	266.4
65°	512.5	400.2	272.4	241.3	236.6
67.5°	451.6	341.7	229.4	211.5	206.7
70°	389.5	283.2	197.1	181.6	179.2
72.5°	328.6	227.0	166.1	155.3	152.9
75°	266.4	176.8	137.4	129.0	127.8
77.5°	209.1	132.6	108.7	105.1	102.7
80°	155.3	99.2	83.6	81.2	80.0
82.5°	106.3	68.1	59.7	59.7	57.3
85°	60.9	41.8	37.0	38.2	37.0
87.5°	22.7	17.9	16.7	17.9	17.9
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	19.73	21.27	20.09	21.58	21.89	16.11	17.65	16.47	17.96	18.28
	3H	21.51	22.89	21.89	23.22	23.58	17.58	18.97	17.96	19.30	19.66
	4H	22.16	23.46	22.56	23.81	24.19	18.17	19.47	18.57	19.82	20.20
	6H	22.64	23.84	23.05	24.21	24.60	18.64	19.84	19.05	20.20	20.60
	8H	22.80	23.94	23.22	24.33	24.73	18.80	19.94	19.22	20.33	20.73
	12H	22.89	23.99	23.32	24.37	24.80	18.91	20.01	19.34	20.39	20.82
4H	2H	19.86	21.16	20.26	21.51	21.89	16.79	18.08	17.18	18.43	18.81
	3H	21.83	22.91	22.24	23.31	23.71	18.46	19.54	18.87	19.94	20.34
	4H	22.58	23.55	23.01	23.96	24.40	19.17	20.14	19.60	20.55	20.99
	6H	23.17	24.02	23.63	24.46	24.92	19.75	20.60	20.21	21.04	21.50
	8H	23.38	24.17	23.84	24.61	25.08	19.96	20.75	20.42	21.19	21.66
	12H	23.52	24.23	24.01	24.71	25.18	20.12	20.83	20.60	21.31	21.78
8H	4H	22.64	23.43	23.10	23.88	24.34	19.53	20.32	19.99	20.77	21.23
	6H	23.30	23.96	23.79	24.45	24.92	20.23	20.89	20.73	21.38	21.85
	8H	23.55	24.14	24.07	24.65	25.14	20.51	21.10	21.03	21.61	22.10
	12H	23.76	24.28	24.27	24.77	25.34	20.76	21.28	21.26	21.77	22.33
12H	4H	22.63	23.34	23.11	23.82	24.29	19.58	20.29	20.06	20.76	21.23
	6H	23.29	23.88	23.81	24.39	24.88	20.30	20.89	20.81	21.40	21.89
	8H	23.59	24.11	24.10	24.60	25.16	20.65	21.17	21.15	21.66	22.22