

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: P1056405

Luminaire Tested: S125R3DR-S1270D935-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056405
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-S1270D935-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

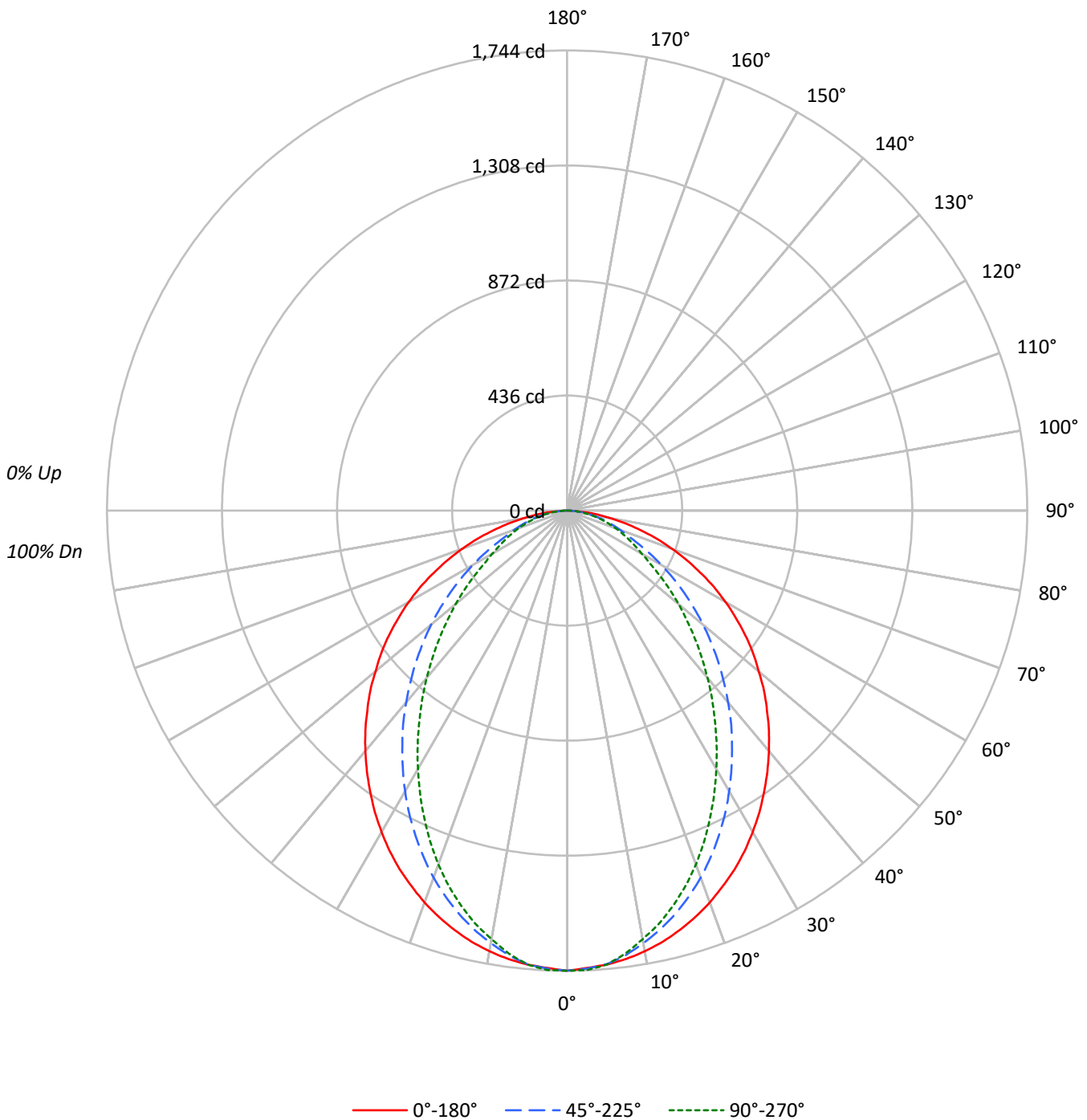
Lumens per Lamp: N/A
Luminaire Lumens: 3696.2 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (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	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	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12328	12328	12328
5°	12255	12246	12255
10°	12174	11950	11838
15°	12050	11585	11347
20°	11889	11136	10736
25°	11709	10604	10007
30°	11480	10027	9232
35°	11229	9402	8427
40°	10976	8760	7634
45°	10710	8088	6841
50°	10425	7397	6055
55°	10163	6642	5265
60°	9804	5838	4626
65°	9319	4953	4301
70°	8749	4429	4026
75°	7910	4078	3794
80°	6872	3701	3542
85°	5370	3269	3269

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10710 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.2	4.4
10°-20°	448.0	12.1
20°-30°	632.9	17.1
30°-40°	696.7	18.8
40°-50°	649.9	17.6
50°-60°	518.8	14.0
60°-70°	349.1	9.4
70°-80°	185.9	5.0
80°-90°	51.7	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°	1244.0	33.7
0°-40°	1940.7	52.5
0°-60°	3109.4	84.1
0°-90°	3696.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3696.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1744	1744	1744	1744	1744	
5°	1727	1741	1726	1720	1727	164
15°	1646	1637	1583	1556	1550	464
25°	1501	1456	1360	1300	1283	691
35°	1301	1224	1090	1004	976	814
45°	1071	970	809	710	684	827
55°	825	700	539	453	427	736
65°	557	435	296	262	257	553
75°	290	192	149	140	139	308
85°	66	45	40	42	40	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1743.9	1743.9	1743.9	1743.9	1743.9
2.5°	1734.8	1749.1	1737.4	1740.0	1742.6
5°	1727.0	1741.3	1725.7	1720.5	1727.0
7.5°	1714.0	1725.7	1699.8	1688.1	1693.3
10°	1695.9	1703.7	1664.7	1649.1	1649.1
12.5°	1673.8	1673.8	1627.0	1605.0	1605.0
15°	1646.5	1637.4	1582.9	1555.6	1550.4
17.5°	1615.4	1598.5	1533.5	1498.5	1492.0
20°	1580.3	1553.0	1480.3	1434.9	1427.1
22.5°	1541.3	1506.3	1421.9	1366.0	1357.0
25°	1501.1	1455.6	1359.5	1299.8	1282.9
27.5°	1455.6	1401.1	1295.9	1228.4	1207.6
30°	1406.3	1344.0	1228.4	1153.1	1131.0
32.5°	1355.7	1285.5	1159.6	1079.1	1054.4
35°	1301.1	1224.5	1089.5	1003.8	976.5
37.5°	1246.6	1163.5	1020.6	931.0	902.5
40°	1189.4	1098.5	949.2	857.0	827.2
42.5°	1132.3	1034.9	879.1	785.6	754.4
45°	1071.3	970.0	809.0	710.3	684.3
47.5°	1012.8	903.8	740.2	644.1	615.5
50°	947.9	834.9	672.6	576.5	550.6
52.5°	888.2	767.4	605.1	515.5	488.2
55°	824.6	699.9	538.9	453.2	427.2
57.5°	758.3	632.4	475.3	394.7	370.1
60°	693.4	564.9	412.9	338.9	327.2
62.5°	627.2	501.2	354.5	297.4	289.6
65°	557.1	435.0	296.1	262.3	257.1
67.5°	490.8	371.4	249.3	229.8	224.6
70°	423.3	307.7	214.3	197.4	194.8
72.5°	357.1	246.7	180.5	168.8	166.2
75°	289.6	192.2	149.3	140.2	138.9
77.5°	227.2	144.1	118.2	114.3	111.7
80°	168.8	107.8	90.9	88.3	87.0
82.5°	115.6	74.0	64.9	64.9	62.3
85°	66.2	45.4	40.3	41.6	40.3
87.5°	24.7	19.5	18.2	19.5	19.5
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	20.02	21.56	20.38	21.87	22.18	16.40	17.94	16.76	18.25	18.56
	3H	21.80	23.18	22.18	23.51	23.87	17.87	19.26	18.25	19.58	19.95
	4H	22.45	23.75	22.85	24.10	24.48	18.46	19.76	18.86	20.11	20.49
	6H	22.93	24.13	23.34	24.50	24.89	18.93	20.13	19.34	20.49	20.88
	8H	23.08	24.23	23.51	24.62	25.02	19.09	20.23	19.51	20.62	21.02
	12H	23.18	24.28	23.61	24.66	25.09	19.20	20.30	19.63	20.68	21.11
4H	2H	20.15	21.45	20.55	21.80	22.18	17.07	18.37	17.47	18.72	19.10
	3H	22.12	23.20	22.53	23.60	24.00	18.75	19.83	19.16	20.23	20.63
	4H	22.87	23.84	23.30	24.25	24.69	19.45	20.43	19.89	20.84	21.28
	6H	23.46	24.31	23.92	24.75	25.21	20.04	20.89	20.50	21.33	21.79
	8H	23.67	24.46	24.13	24.90	25.37	20.25	21.04	20.71	21.48	21.95
	12H	23.81	24.52	24.30	25.00	25.47	20.41	21.12	20.89	21.60	22.07
8H	4H	22.93	23.72	23.39	24.17	24.63	19.82	20.61	20.28	21.06	21.52
	6H	23.59	24.24	24.08	24.73	25.21	20.52	21.18	21.02	21.67	22.14
	8H	23.84	24.43	24.35	24.94	25.43	20.80	21.39	21.32	21.90	22.39
	12H	24.05	24.57	24.56	25.06	25.63	21.05	21.57	21.56	22.06	22.62
12H	4H	22.92	23.63	23.40	24.11	24.58	19.87	20.58	20.35	21.05	21.52
	6H	23.58	24.17	24.10	24.68	25.17	20.59	21.18	21.10	21.69	22.18
	8H	23.88	24.40	24.39	24.89	25.45	20.94	21.46	21.44	21.95	22.51