

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: P1056378

Luminaire Tested: S125R3DR-S1090D935-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056378
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-S1090D935-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

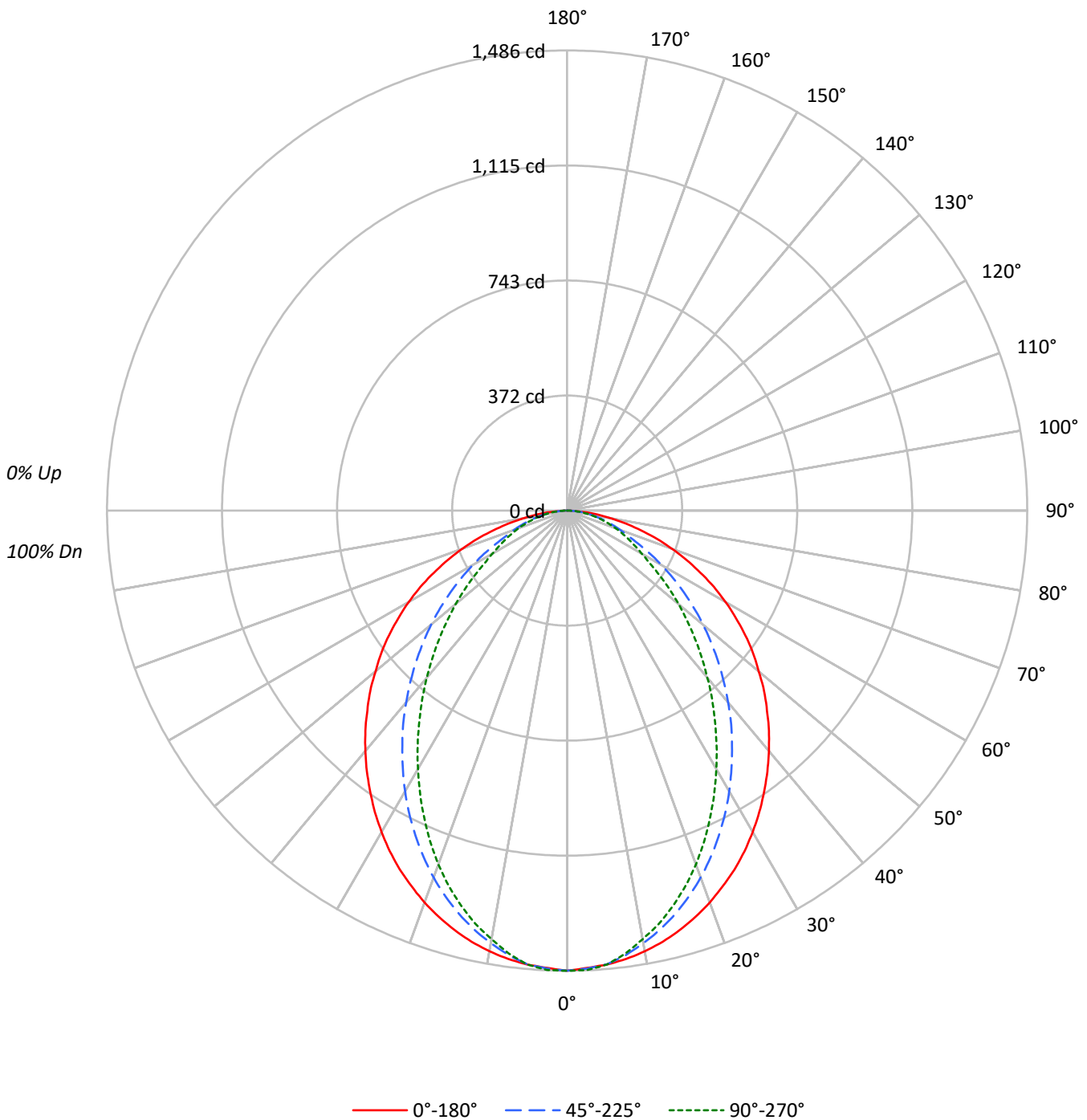
Lumens per Lamp: N/A
Luminaire Lumens: 3149.4 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	10504	10504	10504
5°	10443	10435	10443
10°	10373	10183	10087
15°	10268	9871	9669
20°	10130	9489	9148
25°	9976	9036	8527
30°	9782	8544	7867
35°	9568	8011	7180
40°	9353	7464	6504
45°	9126	6891	5830
50°	8883	6303	5159
55°	8660	5660	4486
60°	8353	4974	3942
65°	7941	4220	3665
70°	7455	3774	3431
75°	6738	3474	3234
80°	5854	3155	3017
85°	4575	2782	2782

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	4.4
10°-20°	381.7	12.1
20°-30°	539.2	17.1
30°-40°	593.6	18.8
40°-50°	553.7	17.6
50°-60°	442.1	14.0
60°-70°	297.5	9.4
70°-80°	158.4	5.0
80°-90°	44.0	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°	1060.0	33.7
0°-40°	1653.7	52.5
0°-60°	2649.5	84.1
0°-90°	3149.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3149.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1486	1486	1486	1486	1486	
5°	1472	1484	1470	1466	1472	140
15°	1403	1395	1349	1326	1321	396
25°	1279	1240	1158	1108	1093	589
35°	1109	1043	928	855	832	694
45°	913	826	689	605	583	705
55°	703	596	459	386	364	627
65°	475	371	252	224	219	471
75°	247	164	127	120	118	263
85°	56	39	34	35	34	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1485.9	1485.9	1485.9	1485.9	1485.9
2.5°	1478.2	1490.4	1480.4	1482.6	1484.8
5°	1471.6	1483.7	1470.5	1466.0	1471.6
7.5°	1460.5	1470.5	1448.3	1438.4	1442.8
10°	1445.0	1451.6	1418.5	1405.2	1405.2
12.5°	1426.2	1426.2	1386.4	1367.6	1367.6
15°	1403.0	1395.2	1348.7	1325.5	1321.1
17.5°	1376.4	1362.0	1306.7	1276.8	1271.3
20°	1346.5	1323.3	1261.3	1222.6	1216.0
22.5°	1313.3	1283.5	1211.5	1164.0	1156.2
25°	1279.0	1240.3	1158.4	1107.5	1093.2
27.5°	1240.3	1193.8	1104.2	1046.7	1029.0
30°	1198.3	1145.2	1046.7	982.5	963.7
32.5°	1155.1	1095.4	988.0	919.5	898.4
35°	1108.7	1043.4	928.3	855.3	832.0
37.5°	1062.2	991.4	869.7	793.3	769.0
40°	1013.5	936.0	808.8	730.2	704.8
42.5°	964.8	881.8	749.1	669.4	642.8
45°	912.8	826.5	689.3	605.2	583.1
47.5°	863.0	770.1	630.7	548.8	524.5
50°	807.7	711.4	573.1	491.3	469.1
52.5°	756.8	653.9	515.6	439.3	416.0
55°	702.6	596.4	459.2	386.1	364.0
57.5°	646.2	538.8	405.0	336.4	315.3
60°	590.8	481.3	351.8	288.8	278.8
62.5°	534.4	427.1	302.1	253.4	246.7
65°	474.7	370.7	252.3	223.5	219.1
67.5°	418.2	316.4	212.4	195.8	191.4
70°	360.7	262.2	182.6	168.2	166.0
72.5°	304.3	210.2	153.8	143.8	141.6
75°	246.7	163.8	127.2	119.5	118.4
77.5°	193.6	122.8	100.7	97.4	95.2
80°	143.8	91.8	77.5	75.2	74.1
82.5°	98.5	63.1	55.3	55.3	53.1
85°	56.4	38.7	34.3	35.4	34.3
87.5°	21.0	16.6	15.5	16.6	16.6
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	19.46	21.00	19.82	21.31	21.63	15.84	17.38	16.21	17.70	18.01
	3H	21.24	22.63	21.62	22.96	23.32	17.32	18.70	17.70	19.03	19.39
	4H	21.90	23.20	22.30	23.55	23.92	17.91	19.21	18.31	19.56	19.93
	6H	22.37	23.57	22.79	23.94	24.33	18.37	19.57	18.78	19.94	20.33
	8H	22.53	23.67	22.95	24.06	24.46	18.53	19.68	18.96	20.06	20.47
	12H	22.62	23.72	23.05	24.10	24.53	18.65	19.74	19.08	20.12	20.55
4H	2H	19.59	20.89	19.99	21.24	21.62	16.52	17.82	16.92	18.17	18.54
	3H	21.56	22.64	21.97	23.04	23.44	18.20	19.28	18.61	19.68	20.08
	4H	22.31	23.28	22.74	23.70	24.14	18.90	19.87	19.33	20.29	20.73
	6H	22.90	23.75	23.36	24.19	24.65	19.48	20.33	19.94	20.78	21.23
	8H	23.11	23.90	23.57	24.35	24.81	19.69	20.49	20.16	20.93	21.40
	12H	23.26	23.97	23.74	24.44	24.91	19.85	20.56	20.34	21.04	21.51
8H	4H	22.37	23.17	22.84	23.61	24.08	19.26	20.06	19.73	20.50	20.97
	6H	23.03	23.69	23.53	24.18	24.66	19.96	20.62	20.46	21.11	21.59
	8H	23.29	23.87	23.80	24.38	24.87	20.25	20.84	20.76	21.35	21.83
	12H	23.49	24.02	24.00	24.51	25.07	20.49	21.01	21.00	21.50	22.07
12H	4H	22.37	23.07	22.85	23.55	24.02	19.31	20.02	19.79	20.50	20.97
	6H	23.03	23.62	23.54	24.13	24.61	20.04	20.63	20.55	21.14	21.62
	8H	23.32	23.84	23.83	24.33	24.90	20.38	20.90	20.89	21.39	21.96