

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: P1056375

Luminaire Tested: S125R3DR-S1090D930-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056375
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-S1090D930-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

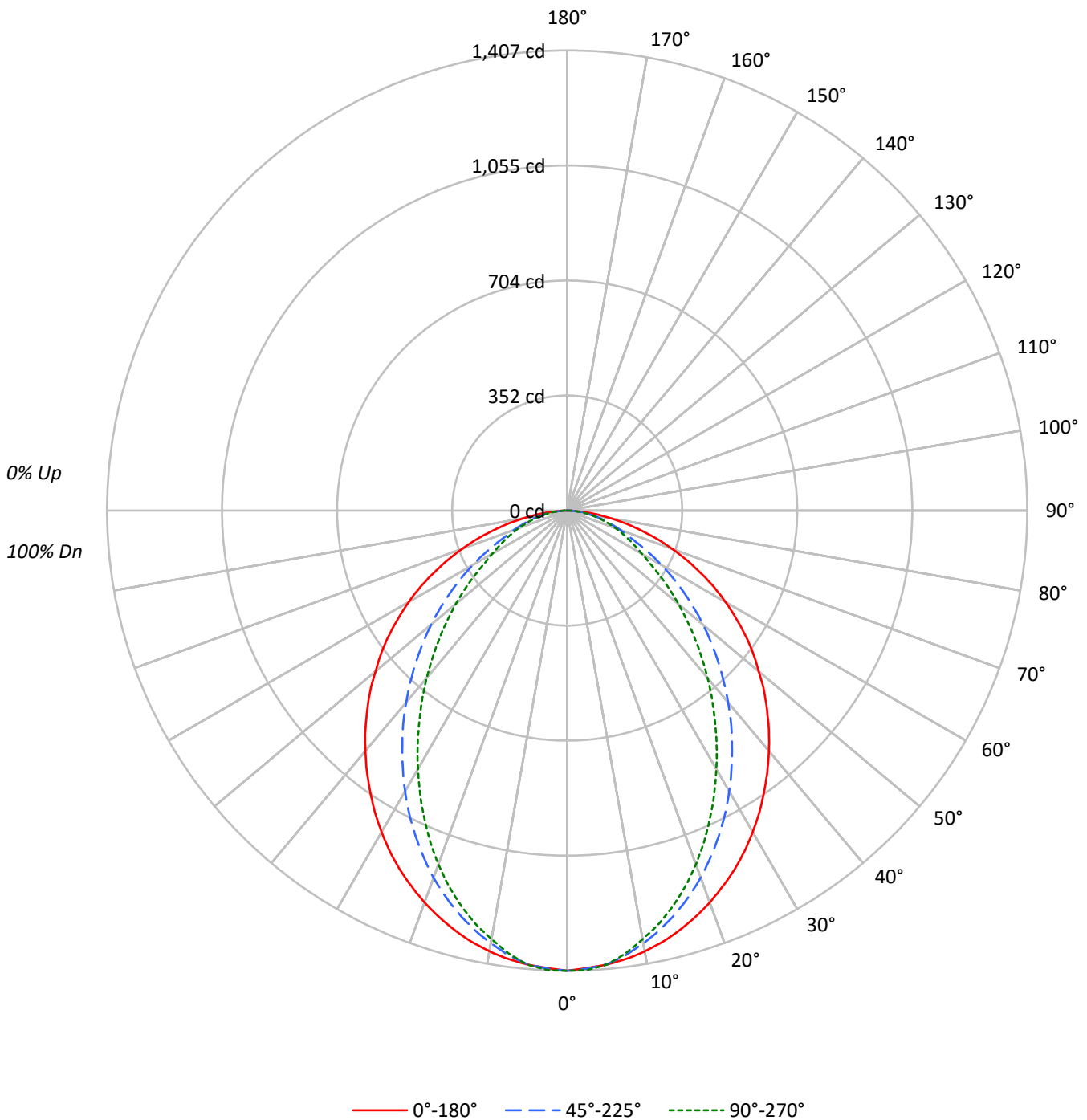
Lumens per Lamp: N/A
Luminaire Lumens: 2982.3 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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°	9947	9947	9947
5°	9889	9881	9889
10°	9822	9642	9552
15°	9723	9347	9156
20°	9593	8986	8662
25°	9448	8557	8074
30°	9263	8090	7450
35°	9060	7586	6800
40°	8856	7068	6159
45°	8642	6525	5520
50°	8411	5969	4885
55°	8200	5359	4248
60°	7911	4711	3733
65°	7519	3996	3469
70°	7061	3574	3249
75°	6381	3291	3062
80°	5545	2984	2858
85°	4331	2636	2636

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8642 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.7	4.4
10°-20°	361.5	12.1
20°-30°	510.6	17.1
30°-40°	562.1	18.8
40°-50°	524.4	17.6
50°-60°	418.6	14.0
60°-70°	281.7	9.4
70°-80°	150.0	5.0
80°-90°	41.7	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°	1003.8	33.7
0°-40°	1565.9	52.5
0°-60°	2508.8	84.1
0°-90°	2982.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2982.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1407	1407	1407	1407	1407	
5°	1394	1405	1392	1388	1394	132
15°	1328	1321	1277	1255	1251	375
25°	1211	1174	1097	1049	1035	558
35°	1050	988	879	810	788	657
45°	864	783	653	573	552	667
55°	665	565	435	366	345	594
65°	450	351	239	212	207	446
75°	234	155	120	113	112	249
85°	53	37	32	34	32	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1407.1	1407.1	1407.1	1407.1	1407.1
2.5°	1399.7	1411.3	1401.8	1403.9	1406.0
5°	1393.5	1405.0	1392.4	1388.2	1393.5
7.5°	1383.0	1392.4	1371.5	1362.0	1366.2
10°	1368.3	1374.6	1343.2	1330.6	1330.6
12.5°	1350.5	1350.5	1312.8	1295.0	1295.0
15°	1328.5	1321.2	1277.2	1255.2	1251.0
17.5°	1303.4	1289.7	1237.3	1209.1	1203.8
20°	1275.1	1253.1	1194.4	1157.7	1151.4
22.5°	1243.6	1215.3	1147.2	1102.2	1094.9
25°	1211.2	1174.5	1097.0	1048.8	1035.1
27.5°	1174.5	1130.5	1045.6	991.1	974.4
30°	1134.7	1084.4	991.1	930.4	912.6
32.5°	1093.8	1037.2	935.6	870.6	850.7
35°	1049.8	988.0	879.0	809.9	787.9
37.5°	1005.8	938.7	823.5	751.2	728.2
40°	959.7	886.4	765.9	691.5	667.4
42.5°	913.6	835.0	709.3	633.9	608.7
45°	864.4	782.6	652.7	573.1	552.1
47.5°	817.2	729.2	597.2	519.7	496.6
50°	764.8	673.7	542.7	465.2	444.2
52.5°	716.6	619.2	488.2	415.9	393.9
55°	665.3	564.7	434.8	365.7	344.7
57.5°	611.9	510.2	383.5	318.5	298.6
60°	559.5	455.8	333.2	273.5	264.0
62.5°	506.0	404.4	286.0	239.9	233.6
65°	449.5	351.0	238.9	211.6	207.4
67.5°	396.0	299.6	201.2	185.4	181.3
70°	341.6	248.3	172.9	159.3	157.2
72.5°	288.1	199.1	145.6	136.2	134.1
75°	233.6	155.1	120.5	113.2	112.1
77.5°	183.3	116.3	95.3	92.2	90.1
80°	136.2	87.0	73.3	71.2	70.2
82.5°	93.2	59.7	52.4	52.4	50.3
85°	53.4	36.7	32.5	33.5	32.5
87.5°	19.9	15.7	14.7	15.7	15.7
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	19.27	20.81	19.63	21.12	21.44	15.65	17.19	16.02	17.51	17.82
	3H	21.05	22.44	21.43	22.77	23.13	17.13	18.51	17.51	18.84	19.20
	4H	21.71	23.01	22.11	23.36	23.73	17.72	19.02	18.12	19.37	19.74
	6H	22.18	23.39	22.60	23.75	24.14	18.18	19.38	18.59	19.75	20.14
	8H	22.34	23.48	22.76	23.87	24.27	18.34	19.49	18.77	19.88	20.28
	12H	22.43	23.53	22.86	23.91	24.34	18.46	19.55	18.89	19.93	20.36
4H	2H	19.40	20.70	19.80	21.05	21.43	16.33	17.63	16.73	17.98	18.35
	3H	21.37	22.46	21.78	22.85	23.26	18.01	19.09	18.42	19.49	19.89
	4H	22.12	23.09	22.55	23.51	23.95	18.71	19.68	19.14	20.10	20.54
	6H	22.71	23.56	23.17	24.00	24.46	19.30	20.14	19.75	20.59	21.04
	8H	22.92	23.71	23.38	24.16	24.62	19.50	20.30	19.97	20.74	21.21
	12H	23.07	23.78	23.55	24.25	24.73	19.66	20.37	20.15	20.85	21.32
8H	4H	22.18	22.98	22.65	23.42	23.89	19.07	19.87	19.54	20.31	20.78
	6H	22.84	23.50	23.34	23.99	24.47	19.78	20.43	20.27	20.92	21.40
	8H	23.10	23.69	23.61	24.19	24.68	20.06	20.65	20.57	21.16	21.65
	12H	23.30	23.83	23.81	24.32	24.88	20.30	20.82	20.81	21.31	21.88
12H	4H	22.18	22.89	22.66	23.36	23.83	19.12	19.83	19.60	20.31	20.78
	6H	22.84	23.43	23.35	23.94	24.42	19.85	20.44	20.36	20.95	21.43
	8H	23.13	23.65	23.64	24.14	24.71	20.19	20.71	20.70	21.20	21.77