

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056539

Luminaire Tested: S125R3DR-H1270D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-H1270D935-X4F0-XX-UDD-FLL-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

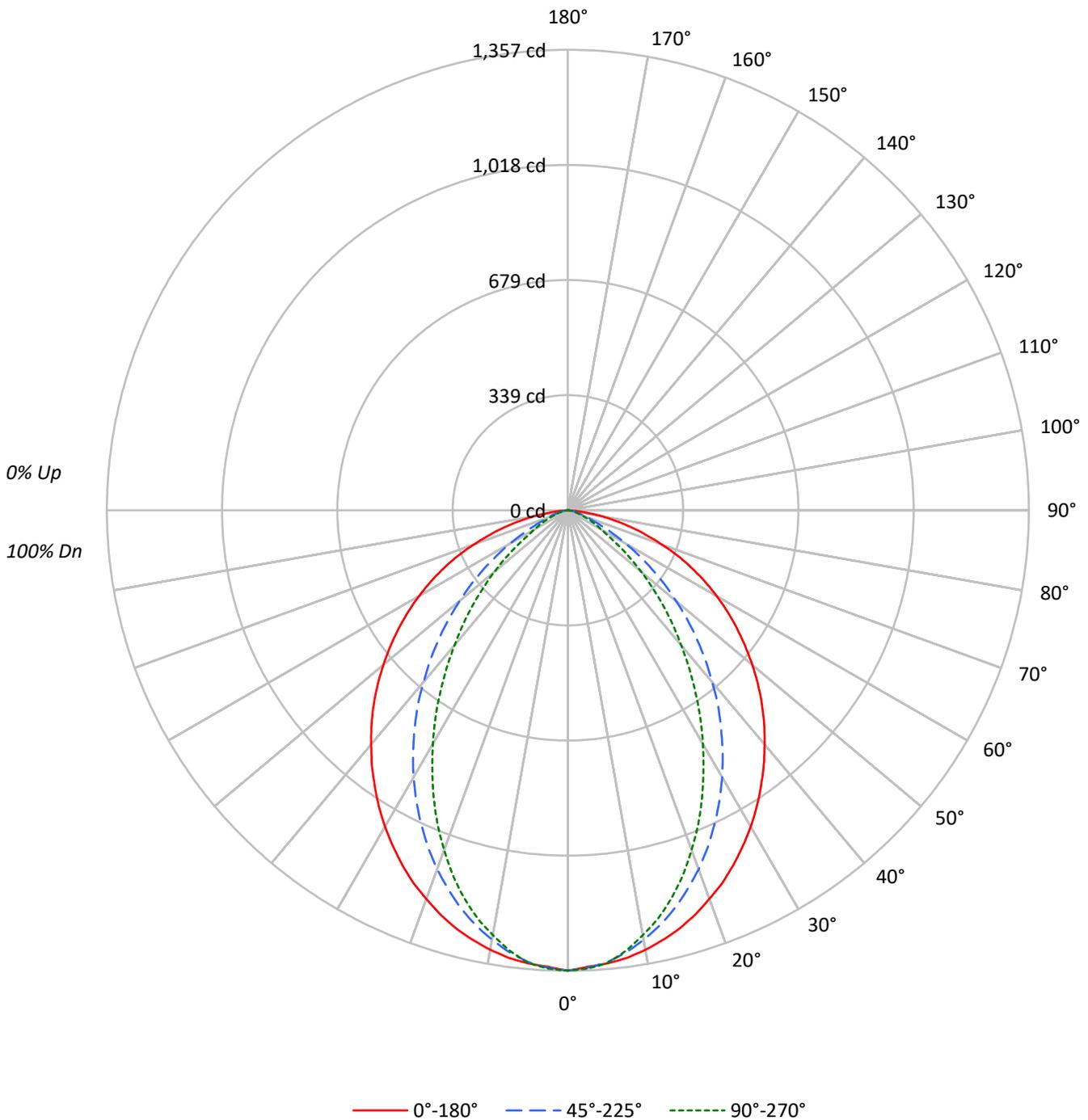
Lumens per Lamp: N/A
Luminaire Lumens: 2451.9 lumens
Efficiency: N/A
Efficacy: 67.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77					77			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47					47			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42					42			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38					38			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35					35			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32					32			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9590	9590	9590
5°	9511	9484	9502
10°	9440	9224	9125
15°	9331	8889	8651
20°	9166	8467	8014
25°	8994	7966	7289
30°	8787	7414	6490
35°	8553	6786	5648
40°	8311	6097	4776
45°	8075	5375	3956
50°	7791	4573	3108
55°	7492	3716	2260
60°	7157	2771	1616
65°	6724	1828	1261
70°	6075	1271	883
75°	5282	822	686
80°	4140	615	562
85°	2141	511	406

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8075 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	5.2
10°-20°	343.5	14.0
20°-30°	475.0	19.4
30°-40°	503.3	20.5
40°-50°	439.3	17.9
50°-60°	312.4	12.7
60°-70°	173.7	7.1
70°-80°	66.8	2.7
80°-90°	11.6	0.5
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°	944.9	38.5
0°-40°	1448.1	59.1
0°-60°	2199.8	89.7
0°-90°	2451.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2451.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1340	1350	1336	1333	1339	127
15°	1275	1264	1215	1188	1182	359
25°	1153	1114	1021	958	934	531
35°	991	923	786	691	654	620
45°	808	711	538	430	396	623
55°	608	487	302	208	183	544
65°	402	264	109	80	75	397
75°	193	75	30	25	25	205
85°	26	8	6	5	5	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1356.6	1356.6	1356.6	1356.6	1356.6
2.5°	1346.5	1360.4	1349.0	1350.3	1351.6
5°	1340.3	1350.3	1336.5	1332.7	1339.0
7.5°	1330.2	1337.7	1313.9	1305.1	1308.9
10°	1315.1	1317.6	1285.0	1272.4	1271.2
12.5°	1296.3	1292.5	1252.3	1232.2	1231.0
15°	1274.9	1263.6	1214.6	1188.3	1182.0
17.5°	1248.6	1231.0	1170.7	1136.8	1126.7
20°	1218.4	1194.5	1125.5	1081.5	1065.2
22.5°	1188.3	1155.6	1075.2	1019.9	1002.4
25°	1153.1	1114.2	1021.2	958.4	934.5
27.5°	1115.4	1068.9	965.9	893.1	864.2
30°	1076.5	1022.5	908.2	826.5	795.1
32.5°	1035.0	973.5	847.9	758.7	726.0
35°	991.1	923.2	786.3	690.9	654.4
37.5°	947.1	871.7	726.0	624.3	586.6
40°	900.6	819.0	660.7	556.4	517.5
42.5°	855.4	765.0	599.2	492.4	457.2
45°	807.7	710.9	537.6	429.6	395.7
47.5°	758.7	654.4	476.1	370.5	336.6
50°	708.4	599.2	415.8	312.8	282.6
52.5°	658.2	543.9	359.2	257.5	231.1
55°	607.9	487.4	301.5	208.5	183.4
57.5°	557.7	432.1	247.5	163.3	140.7
60°	506.2	375.6	196.0	120.6	114.3
62.5°	454.7	320.3	152.0	99.2	94.2
65°	402.0	263.8	109.3	80.4	75.4
67.5°	349.2	212.3	79.1	61.5	57.8
70°	293.9	162.0	61.5	46.5	42.7
72.5°	241.2	116.8	44.0	33.9	32.7
75°	193.4	75.4	30.1	25.1	25.1
77.5°	145.7	45.2	21.4	18.8	18.8
80°	101.7	26.4	15.1	13.8	13.8
82.5°	61.5	13.8	10.0	8.8	8.8
85°	26.4	7.5	6.3	5.0	5.0
87.5°	5.0	2.5	2.5	2.5	2.5
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	19.02	20.46	19.38	20.77	21.09	11.65	13.10	12.02	13.41	13.73
	3H	20.57	21.86	20.95	22.19	22.55	12.22	13.50	12.60	13.83	14.20
	4H	21.10	22.30	21.50	22.65	23.03	12.34	13.54	12.74	13.89	14.27
	6H	21.43	22.54	21.85	22.91	23.30	12.41	13.51	12.82	13.88	14.27
	8H	21.52	22.57	21.94	22.96	23.36	12.41	13.46	12.84	13.85	14.26
	12H	21.54	22.55	21.97	22.93	23.36	12.40	13.41	12.83	13.79	14.22
4H	2H	18.91	20.11	19.31	20.46	20.84	12.22	13.42	12.62	13.77	14.15
	3H	20.58	21.57	20.99	21.97	22.37	12.89	13.88	13.30	14.28	14.68
	4H	21.13	22.01	21.56	22.43	22.87	13.05	13.93	13.48	14.35	14.79
	6H	21.52	22.29	21.98	22.73	23.19	13.16	13.92	13.62	14.37	14.83
	8H	21.63	22.34	22.09	22.78	23.25	13.17	13.88	13.64	14.33	14.80
	12H	21.67	22.31	22.16	22.79	23.26	13.17	13.81	13.66	14.29	14.76
8H	4H	21.03	21.74	21.50	22.19	22.66	13.32	14.03	13.78	14.48	14.95
	6H	21.42	22.00	21.92	22.50	22.98	13.45	14.04	13.95	14.53	15.01
	8H	21.53	22.05	22.04	22.56	23.05	13.48	14.00	14.00	14.52	15.01
	12H	21.59	22.05	22.10	22.55	23.11	13.50	13.96	14.01	14.46	15.03
12H	4H	21.00	21.63	21.48	22.11	22.58	13.33	13.97	13.82	14.45	14.92
	6H	21.37	21.89	21.88	22.40	22.89	13.46	13.99	13.98	14.50	14.99
	8H	21.49	21.96	22.01	22.45	23.02	13.52	13.99	14.03	14.48	15.05