

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: P1061945

Luminaire Tested: S125RDR-H1270D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061945
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

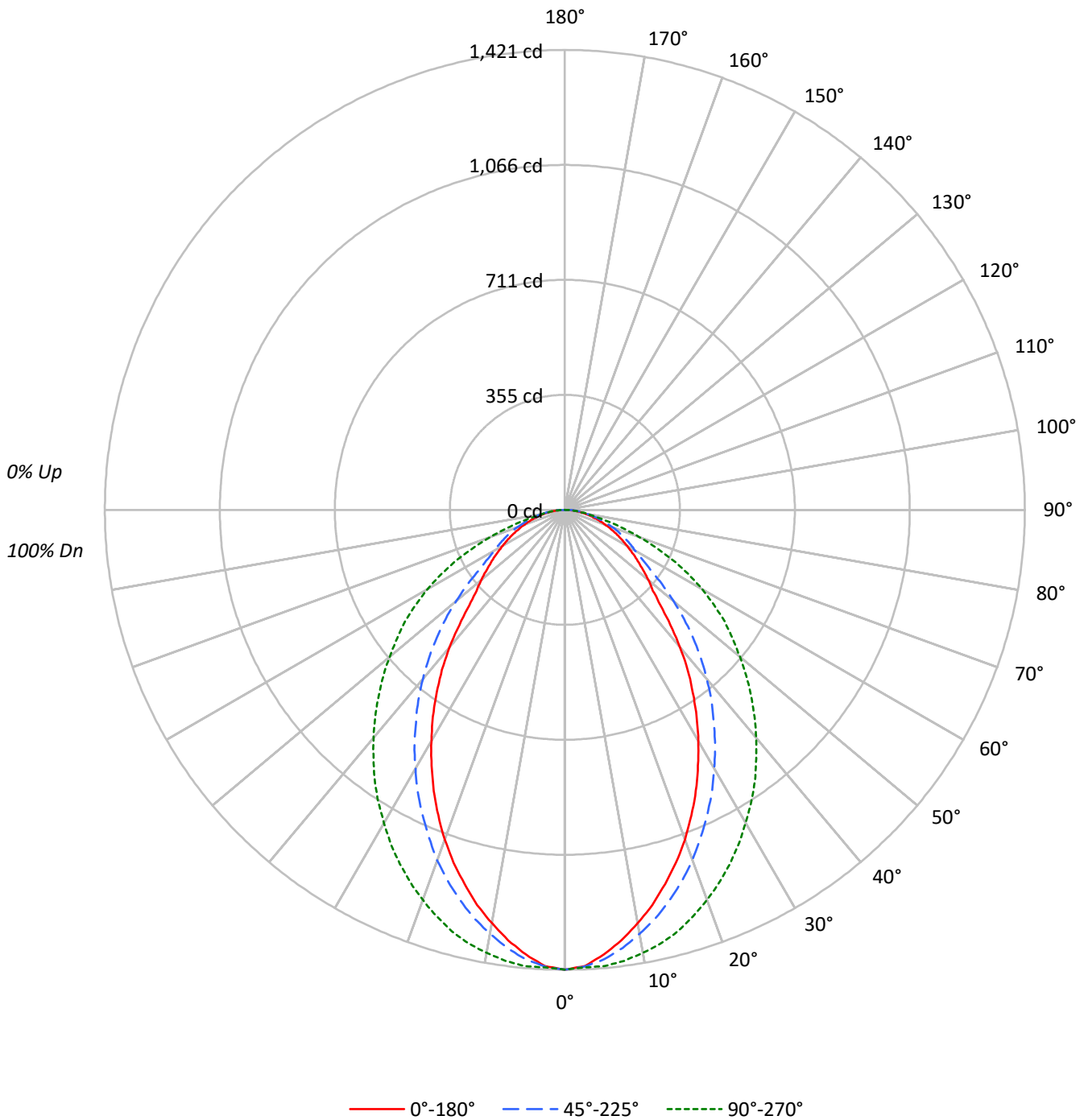
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2663.3 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9782	9782	9782
5°	9534	9633	9780
10°	9069	9297	9715
15°	8528	8902	9611
20°	7945	8444	9401
25°	7278	7903	9165
30°	6556	7334	8881
35°	5798	6740	8601
40°	4975	6136	8266
45°	4063	5459	7918
50°	3603	4682	7556
55°	3305	3885	7241
60°	3049	3440	6742
65°	2845	3307	6012
70°	2657	3142	4914
75°	2455	2945	3623
80°	2308	2756	2645
85°	2133	2694	2244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7918 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	4.9
10°-20°	354.1	13.3
20°-30°	486.7	18.3
30°-40°	515.8	19.4
40°-50°	450.3	16.9
50°-60°	342.1	12.8
60°-70°	229.2	8.6
70°-80°	118.2	4.4
80°-90°	35.4	1.3
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°	972.3	36.5
0°-40°	1488.1	55.9
0°-60°	2280.5	85.6
0°-90°	2663.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2663.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1380	1394	1394	1404	1415	129
15°	1196	1219	1249	1304	1348	336
25°	958	988	1040	1127	1206	439
35°	690	730	802	915	1023	430
45°	417	458	561	694	813	329
55°	275	284	324	476	603	247
65°	175	179	203	271	369	173
75°	92	98	111	118	136	99
85°	27	34	34	31	28	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1420.7	1420.7	1420.7	1420.7	1420.7
2.5°	1410.7	1420.7	1412.2	1412.2	1415.0
5°	1379.5	1393.7	1393.7	1403.6	1415.0
7.5°	1341.2	1356.8	1365.3	1388.0	1405.1
10°	1297.2	1314.2	1329.8	1363.9	1389.5
12.5°	1250.4	1268.8	1292.9	1336.9	1372.4
15°	1196.4	1219.1	1248.9	1304.3	1348.3
17.5°	1142.5	1165.2	1202.1	1267.4	1317.1
20°	1084.3	1108.4	1152.4	1223.4	1283.0
22.5°	1021.9	1048.8	1095.7	1176.6	1246.1
25°	958.0	987.8	1040.3	1126.9	1206.4
27.5°	891.3	926.8	983.5	1075.8	1163.8
30°	824.6	860.1	922.5	1023.3	1117.0
32.5°	757.9	796.2	864.3	970.8	1071.5
35°	689.8	729.5	801.9	915.4	1023.3
37.5°	623.1	662.8	743.7	861.5	970.8
40°	553.5	594.7	682.7	806.1	919.7
42.5°	482.5	526.5	621.6	749.4	867.2
45°	417.3	458.4	560.6	694.0	813.2
47.5°	369.0	396.0	499.6	637.2	760.7
50°	336.4	350.6	437.1	581.9	705.4
52.5°	303.7	315.1	378.9	525.1	652.9
55°	275.3	283.9	323.6	475.5	603.2
57.5°	247.0	255.5	281.0	425.8	545.0
60°	221.4	228.5	249.8	373.3	489.6
62.5°	197.3	203.0	225.7	323.6	430.0
65°	174.6	178.8	203.0	271.1	369.0
67.5°	151.9	156.1	180.2	221.4	303.7
70°	132.0	133.4	156.1	180.2	244.1
72.5°	112.1	113.5	132.0	146.2	187.3
75°	92.3	97.9	110.7	117.8	136.2
77.5°	75.2	82.3	89.4	92.3	92.3
80°	58.2	66.7	69.5	69.5	66.7
82.5°	42.6	49.7	51.1	48.3	45.4
85°	27.0	34.1	34.1	31.2	28.4
87.5°	12.8	18.5	18.5	17.0	12.8
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	14.53	16.03	14.90	16.34	16.66	18.46	19.95	18.82	20.27	20.58
	3H	16.10	17.44	16.48	17.77	18.13	19.88	21.22	20.26	21.55	21.91
	4H	16.72	17.97	17.12	18.32	18.70	20.29	21.55	20.69	21.90	22.28
	6H	17.21	18.37	17.62	18.74	19.13	20.51	21.67	20.92	22.04	22.43
	8H	17.38	18.49	17.81	18.88	19.28	20.57	21.68	21.00	22.07	22.47
	12H	17.51	18.57	17.94	18.95	19.38	20.60	21.66	21.03	22.05	22.47
4H	2H	15.27	16.53	15.67	16.88	17.26	18.58	19.84	18.98	20.19	20.57
	3H	17.05	18.09	17.46	18.49	18.89	20.19	21.24	20.60	21.64	22.04
	4H	17.78	18.72	18.21	19.14	19.58	20.72	21.66	21.15	22.08	22.52
	6H	18.42	19.24	18.88	19.68	20.14	21.06	21.88	21.52	22.32	22.78
	8H	18.65	19.41	19.11	19.86	20.32	21.16	21.93	21.63	22.37	22.84
	12H	18.82	19.50	19.30	19.98	20.45	21.24	21.92	21.72	22.40	22.87
8H	4H	18.18	18.95	18.65	19.39	19.86	20.83	21.59	21.29	22.04	22.50
	6H	18.97	19.60	19.47	20.09	20.57	21.27	21.90	21.76	22.39	22.87
	8H	19.29	19.86	19.81	20.37	20.86	21.42	21.99	21.94	22.50	22.99
	12H	19.57	20.07	20.08	20.56	21.13	21.56	22.06	22.07	22.55	23.12
12H	4H	18.23	18.91	18.71	19.39	19.86	20.83	21.51	21.31	21.99	22.46
	6H	19.05	19.62	19.57	20.13	20.62	21.28	21.85	21.80	22.36	22.85
	8H	19.45	19.95	19.96	20.44	21.01	21.49	21.99	22.00	22.48	23.05