

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: P1061989

Luminaire Tested: S125RDR-H1270D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061989
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D940-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

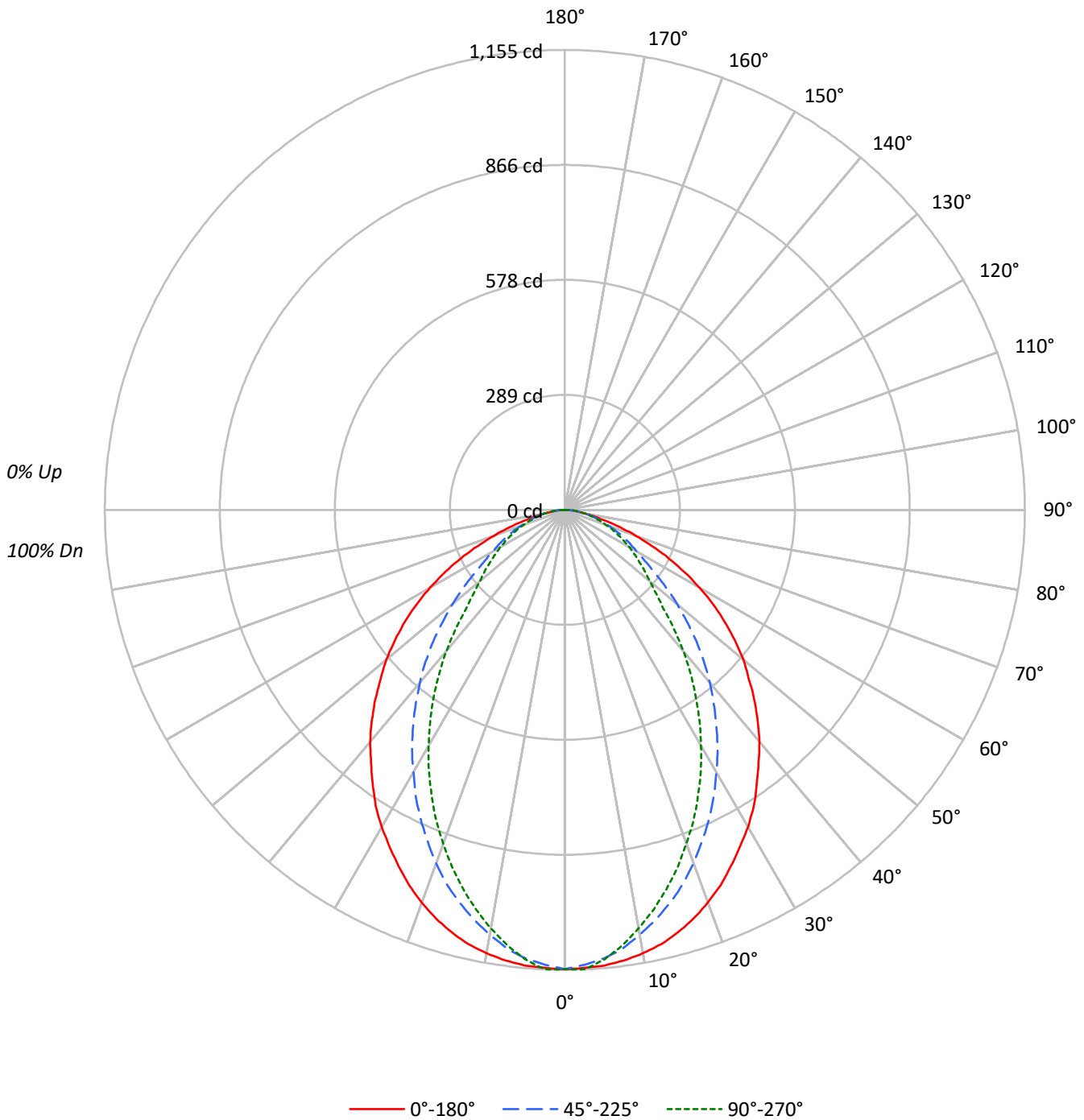
Lumens per Lamp: N/A
Luminaire Lumens: 2185.4 lumens
Efficiency: N/A
Efficacy: 59.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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									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													100															
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87													87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75													75															
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65													65															
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57													57															
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50													50															
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45													45															
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40													40															
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36													36															
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33													33															
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30													30															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7944	7944	7944
5°	7939	7818	7835
10°	7908	7575	7461
15°	7830	7277	7027
20°	7691	6920	6535
25°	7499	6509	6014
30°	7310	6045	5437
35°	7065	5580	4822
40°	6834	5089	4154
45°	6549	4549	3403
50°	6266	3945	2979
55°	5880	3293	2751
60°	5365	2881	2570
65°	4694	2633	2388
70°	3807	2369	2218
75°	2732	2165	2067
80°	1887	1939	1939
85°	1382	1683	1777

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6549 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.3	4.9
10°-20°	290.1	13.3
20°-30°	401.0	18.3
30°-40°	427.1	19.5
40°-50°	375.2	17.2
50°-60°	284.5	13.0
60°-70°	184.7	8.5
70°-80°	91.5	4.2
80°-90°	24.0	1.1
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°	798.4	36.5
0°-40°	1225.5	56.1
0°-60°	1885.2	86.3
0°-90°	2185.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2185.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1154	1154	1154	1154	1154	
5°	1149	1146	1131	1135	1134	109
15°	1098	1074	1021	997	986	309
25°	987	933	857	813	792	455
35°	840	763	664	604	574	526
45°	673	579	467	383	350	519
55°	490	393	274	237	229	437
65°	288	214	162	149	147	285
75°	103	90	81	79	78	115
85°	18	20	21	21	22	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1153.7	1153.7	1153.7	1153.7	1153.7
2.5°	1151.1	1153.7	1143.6	1152.4	1154.9
5°	1148.6	1146.1	1131.1	1134.9	1133.6
7.5°	1141.1	1136.1	1111.1	1108.6	1103.5
10°	1131.1	1118.6	1083.5	1074.7	1067.2
12.5°	1117.3	1097.3	1054.7	1037.2	1028.4
15°	1098.5	1073.5	1020.9	997.1	985.8
17.5°	1076.0	1040.9	985.8	953.2	940.7
20°	1049.7	1008.3	944.5	906.9	891.9
22.5°	1020.9	972.0	900.6	860.5	844.3
25°	987.1	933.2	856.8	812.9	791.6
27.5°	953.2	893.1	810.4	761.6	739.0
30°	919.4	850.5	760.3	707.7	683.9
32.5°	883.1	806.7	714.0	656.4	628.8
35°	840.5	762.8	663.9	603.8	573.7
37.5°	799.2	716.5	615.0	547.4	518.6
40°	760.3	672.6	566.2	492.3	462.2
42.5°	716.5	626.3	517.3	439.7	405.8
45°	672.6	578.7	467.2	383.3	349.5
47.5°	626.3	533.6	414.6	331.9	309.4
50°	585.0	487.3	368.3	293.1	278.1
52.5°	537.4	442.2	320.7	263.0	253.0
55°	489.8	393.3	274.3	236.7	229.2
57.5°	440.9	349.5	238.0	214.2	206.7
60°	389.6	304.4	209.2	190.4	186.6
62.5°	338.2	258.0	184.1	170.4	165.3
65°	288.1	214.2	161.6	149.1	146.6
67.5°	236.7	174.1	139.0	130.3	129.0
70°	189.1	141.5	117.7	112.7	110.2
72.5°	145.3	112.7	99.0	95.2	93.9
75°	102.7	90.2	81.4	78.9	77.7
77.5°	68.9	68.9	65.1	62.6	63.9
80°	47.6	50.1	48.9	48.9	48.9
82.5°	31.3	33.8	35.1	35.1	35.1
85°	17.5	20.0	21.3	21.3	22.5
87.5°	6.3	7.5	8.8	10.0	10.0
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	17.75	19.24	18.12	19.56	19.87	13.99	15.49	14.36	15.80	16.11
	3H	19.06	20.40	19.44	20.73	21.09	15.58	16.91	15.96	17.24	17.60
	4H	19.43	20.69	19.83	21.04	21.41	16.18	17.43	16.58	17.78	18.16
	6H	19.61	20.77	20.02	21.13	21.52	16.65	17.81	17.07	18.18	18.57
	8H	19.65	20.75	20.07	21.14	21.54	16.81	17.91	17.24	18.30	18.70
	12H	19.66	20.71	20.09	21.09	21.52	16.92	17.98	17.36	18.36	18.79
4H	2H	17.87	19.12	18.27	19.47	19.85	14.66	15.91	15.06	16.26	16.64
	3H	19.35	20.39	19.76	20.79	21.19	16.44	17.48	16.85	17.88	18.28
	4H	19.83	20.76	20.26	21.18	21.62	17.16	18.09	17.59	18.50	18.94
	6H	20.11	20.92	20.57	21.37	21.83	17.75	18.56	18.20	19.00	19.46
	8H	20.18	20.94	20.65	21.38	21.85	17.95	18.71	18.41	19.15	19.62
	12H	20.22	20.90	20.71	21.38	21.85	18.10	18.78	18.59	19.26	19.73
8H	4H	19.91	20.67	20.37	21.11	21.58	17.47	18.22	17.93	18.67	19.14
	6H	20.27	20.90	20.77	21.39	21.87	18.17	18.80	18.67	19.29	19.77
	8H	20.39	20.95	20.90	21.46	21.95	18.45	19.01	18.97	19.52	20.01
	12H	20.48	20.97	20.99	21.46	22.03	18.68	19.18	19.19	19.67	20.24
12H	4H	19.90	20.58	20.39	21.06	21.53	17.49	18.17	17.98	18.65	19.12
	6H	20.28	20.84	20.79	21.35	21.84	18.22	18.79	18.74	19.30	19.79
	8H	20.44	20.93	20.95	21.42	21.99	18.56	19.06	19.07	19.55	20.12