

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: P1057806

Luminaire Tested: S122RDR-S1005D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057806
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

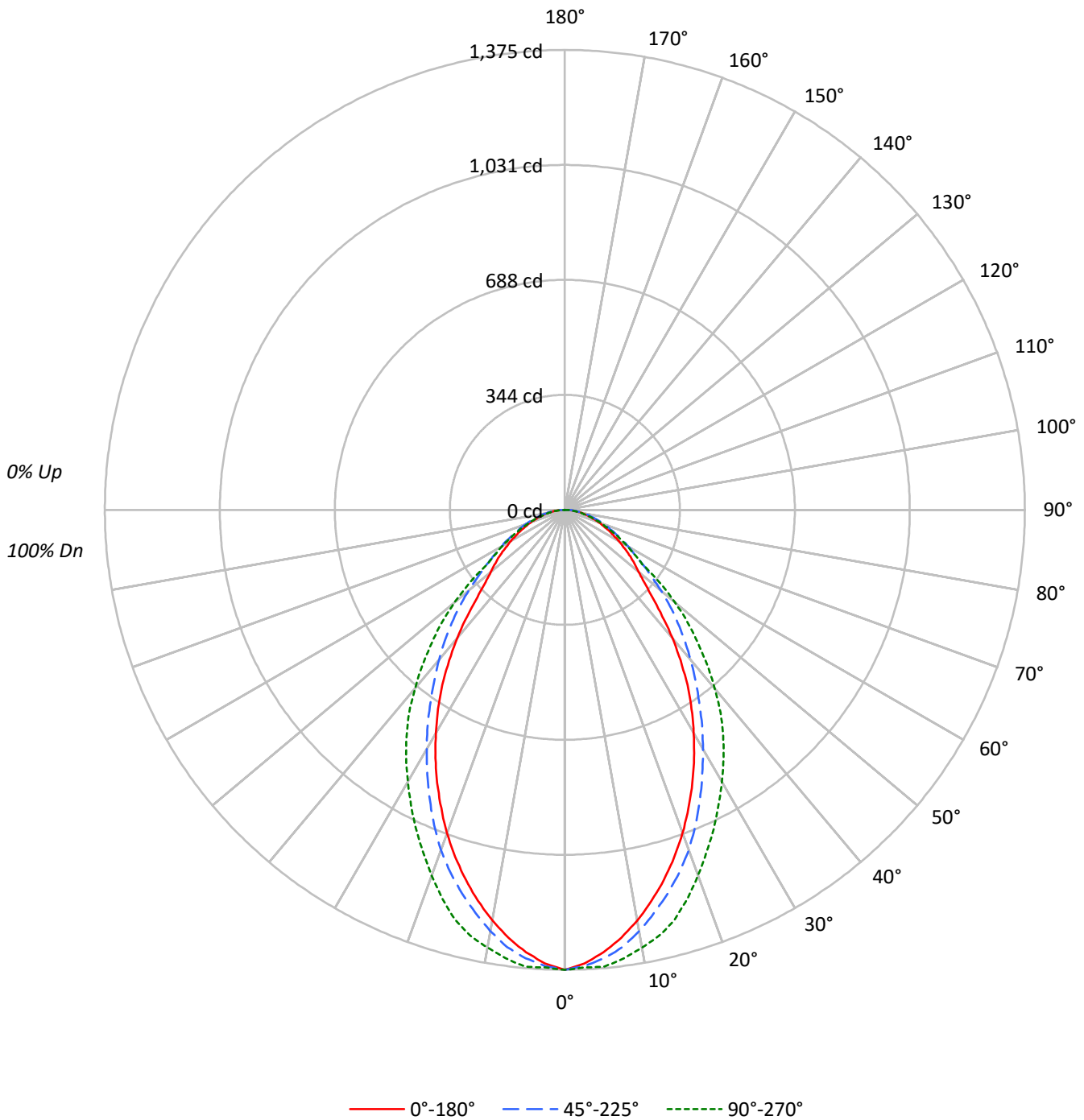
Lumens per Lamp: N/A
Luminaire Lumens: 2241.7 lumens
Efficiency: N/A
Efficacy: 53.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25374	25374	25374
5°	24595	24923	25388
10°	23354	23965	24905
15°	21862	22681	24235
20°	20208	21253	22849
25°	18363	19448	21433
30°	16413	17578	20005
35°	14388	15755	18584
40°	12039	14067	16775
45°	9645	12463	14663
50°	8276	10739	12310
55°	7563	9133	9085
60°	6875	8075	7912
65°	6261	7230	6907
70°	5746	6620	6140
75°	5376	6117	5376
80°	5026	5653	4718
85°	5018	5949	4065

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14663 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	5.7
10°-20°	336.1	15.0
20°-30°	443.3	19.8
30°-40°	446.3	19.9
40°-50°	363.3	16.2
50°-60°	247.7	11.0
60°-70°	160.8	7.2
70°-80°	88.5	3.9
80°-90°	28.9	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°	906.2	40.4
0°-40°	1352.6	60.3
0°-60°	1963.5	87.6
0°-90°	2241.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2241.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1328	1353	1346	1357	1371	124
15°	1144	1174	1187	1236	1269	321
25°	902	932	955	998	1053	414
35°	639	671	699	760	825	397
45°	370	416	478	519	562	291
55°	235	259	284	285	282	211
65°	143	170	166	157	158	143
75°	75	93	86	77	75	80
85°	24	31	28	22	19	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1375.1	1375.1	1375.1	1375.1	1375.1
2.5°	1357.3	1379.5	1364.7	1366.2	1369.2
5°	1327.8	1352.9	1345.5	1357.3	1370.6
7.5°	1290.8	1315.9	1318.9	1336.6	1352.9
10°	1246.4	1274.5	1279.0	1305.6	1329.2
12.5°	1197.6	1228.7	1234.6	1273.0	1304.1
15°	1144.4	1174.0	1187.3	1236.1	1268.6
17.5°	1088.2	1116.3	1137.0	1181.4	1218.3
20°	1029.1	1055.7	1082.3	1122.2	1163.6
22.5°	965.5	995.1	1020.2	1060.1	1107.4
25°	901.9	931.5	955.2	998.0	1052.7
27.5°	836.9	866.4	890.1	935.9	995.1
30°	770.3	801.4	825.0	876.8	938.9
32.5°	705.3	736.3	762.9	817.6	882.7
35°	638.7	671.3	699.4	760.0	825.0
37.5°	567.8	604.7	640.2	700.8	764.4
40°	499.8	541.2	584.0	640.2	696.4
42.5°	431.7	477.6	530.8	578.1	629.9
45°	369.6	415.5	477.6	519.0	561.9
47.5°	320.8	359.3	425.8	459.8	498.3
50°	288.3	314.9	374.1	400.7	428.8
52.5°	261.7	283.9	325.3	343.0	357.8
55°	235.1	258.7	283.9	285.4	282.4
57.5°	208.5	235.1	248.4	238.0	244.0
60°	186.3	212.9	218.8	208.5	214.4
62.5°	162.6	192.2	192.2	181.9	184.8
65°	143.4	170.0	165.6	156.7	158.2
67.5°	124.2	150.8	143.4	134.5	134.5
70°	106.5	131.6	122.7	113.8	113.8
72.5°	90.2	110.9	105.0	94.6	93.1
75°	75.4	93.1	85.8	76.9	75.4
77.5°	60.6	75.4	69.5	62.1	59.1
80°	47.3	60.6	53.2	47.3	44.4
82.5°	35.5	45.8	39.9	34.0	31.0
85°	23.7	31.0	28.1	22.2	19.2
87.5°	11.8	20.7	17.7	14.8	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)