

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: P1055166

Luminaire Tested: S122R3DRP-S1005D940-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1055166
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DRP-S1005D940-X4F0-XX-UDD-F-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

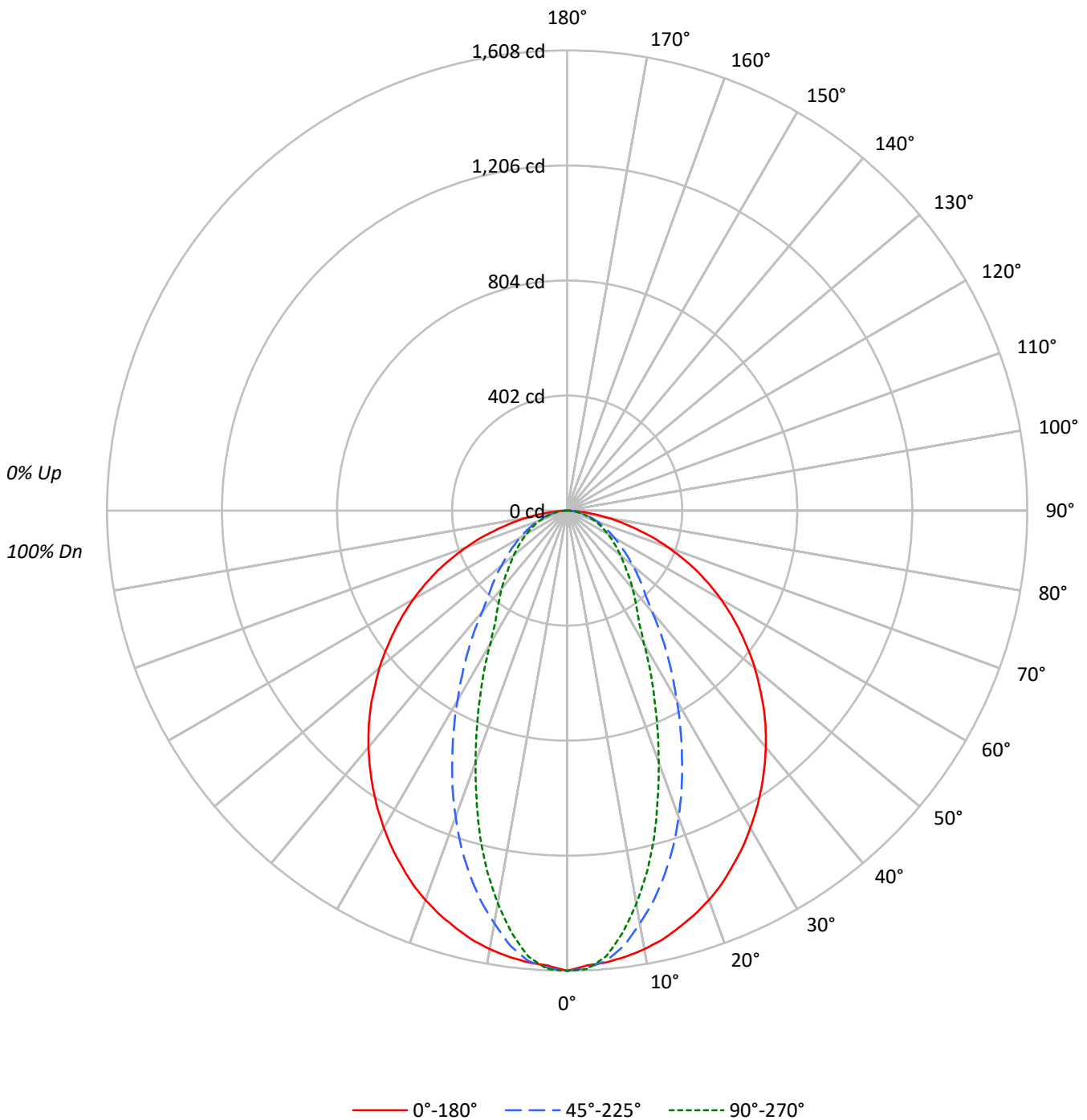
Lumens per Lamp: N/A
Luminaire Lumens: 2432.9 lumens
Efficiency: N/A
Efficacy: 58.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (A_{in}): 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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89					87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77					75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68					66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60					58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54					52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48					46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40					38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37					35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34					32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30473	30473	30473
5°	30129	30026	29744
10°	29935	28174	26829
15°	29596	25824	23080
20°	29202	22966	18845
25°	28618	19849	15041
30°	28009	16771	11739
35°	27373	14028	9860
40°	26708	11374	8780
45°	26016	9946	7856
50°	25251	8801	7174
55°	24387	7951	6662
60°	23542	7237	6218
65°	22428	6630	5846
70°	20784	6182	5512
75°	18410	5615	5219
80°	15700	5281	4844
85°	10825	4674	4391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26016 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.4	6.1
10°-20°	372.1	15.3
20°-30°	458.6	18.8
30°-40°	439.9	18.1
40°-50°	379.5	15.6
50°-60°	294.4	12.1
60°-70°	201.6	8.3
70°-80°	109.5	4.5
80°-90°	30.0	1.2
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°	978.1	40.2
0°-40°	1418.0	58.3
0°-60°	2091.8	86.0
0°-90°	2432.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2432.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1608	1608	1608	1608	1608	
5°	1584	1607	1579	1559	1564	150
15°	1509	1463	1317	1209	1177	426
25°	1369	1222	950	775	720	631
35°	1184	939	606	452	426	740
45°	971	654	371	307	293	748
55°	738	393	241	208	202	661
65°	500	214	148	134	130	494
75°	252	98	77	73	71	269
85°	50	24	22	22	20	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1608.4	1608.4	1608.4	1608.4	1608.4
2.5°	1590.9	1617.8	1599.0	1599.0	1603.0
5°	1584.2	1607.1	1578.8	1558.7	1564.0
7.5°	1572.1	1588.3	1531.8	1488.7	1487.4
10°	1556.0	1557.3	1464.5	1408.0	1394.6
12.5°	1535.8	1514.3	1395.9	1311.2	1291.0
15°	1508.9	1463.2	1316.6	1209.0	1176.7
17.5°	1480.7	1410.7	1231.9	1097.4	1053.0
20°	1448.4	1347.5	1139.1	985.8	934.7
22.5°	1412.1	1287.0	1046.3	878.2	824.4
25°	1369.0	1222.5	949.5	774.6	719.5
27.5°	1327.4	1156.6	856.7	683.2	626.7
30°	1280.3	1085.3	766.6	595.8	536.6
32.5°	1233.2	1012.7	683.2	512.4	468.0
35°	1183.5	938.7	606.5	451.9	426.3
37.5°	1132.4	866.1	533.9	411.5	388.7
40°	1079.9	793.5	459.9	372.5	355.0
42.5°	1026.1	722.2	408.8	340.2	324.1
45°	971.0	653.6	371.2	306.6	293.2
47.5°	911.8	585.0	334.9	278.4	266.3
50°	856.7	519.1	298.6	252.8	243.4
52.5°	797.5	454.6	269.0	230.0	221.9
55°	738.3	392.7	240.7	208.4	201.7
57.5°	680.5	333.5	213.8	188.3	182.9
60°	621.3	286.5	191.0	169.4	164.1
62.5°	560.8	248.8	169.4	152.0	146.6
65°	500.3	213.8	147.9	134.5	130.4
67.5°	437.1	180.2	129.1	118.3	115.7
70°	375.2	150.6	111.6	102.2	99.5
72.5°	314.7	122.4	94.1	87.4	84.7
75°	251.5	98.2	76.7	72.6	71.3
77.5°	196.3	76.7	61.9	59.2	57.8
80°	143.9	56.5	48.4	45.7	44.4
82.5°	95.5	39.0	35.0	33.6	32.3
85°	49.8	24.2	21.5	21.5	20.2
87.5°	16.1	10.8	10.8	10.8	9.4
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	21.48	22.95	21.85	23.26	23.58	16.29	17.75	16.65	18.07	18.38
	3H	23.81	25.13	24.19	25.45	25.82	17.93	19.25	18.31	19.58	19.94
	4H	24.71	25.94	25.11	26.29	26.67	18.57	19.80	18.97	20.15	20.53
	6H	25.37	26.51	25.78	26.87	27.27	19.06	20.20	19.48	20.57	20.96
	8H	25.58	26.66	26.00	27.05	27.45	19.23	20.32	19.66	20.71	21.11
	12H	25.69	26.73	26.12	27.11	27.54	19.35	20.39	19.78	20.77	21.20
4H	2H	21.50	22.73	21.90	23.08	23.46	17.00	18.24	17.40	18.58	18.96
	3H	23.91	24.93	24.32	25.33	25.74	18.85	19.87	19.26	20.27	20.68
	4H	24.84	25.76	25.27	26.18	26.62	19.60	20.52	20.03	20.94	21.37
	6H	25.62	26.42	26.07	26.86	27.32	20.21	21.01	20.67	21.46	21.92
	8H	25.89	26.64	26.35	27.08	27.55	20.43	21.18	20.89	21.62	22.09
	12H	26.06	26.73	26.55	27.21	27.68	20.59	21.26	21.07	21.74	22.21
8H	4H	24.83	25.58	25.30	26.03	26.49	19.97	20.72	20.44	21.17	21.64
	6H	25.64	26.26	26.14	26.75	27.23	20.71	21.33	21.21	21.82	22.30
	8H	25.94	26.49	26.46	27.01	27.49	21.01	21.56	21.52	22.07	22.56
	12H	26.17	26.66	26.68	27.15	27.72	21.25	21.74	21.76	22.23	22.80
12H	4H	24.81	25.48	25.29	25.96	26.43	20.03	20.70	20.52	21.18	21.65
	6H	25.61	26.17	26.13	26.68	27.17	20.80	21.35	21.31	21.86	22.35
	8H	25.95	26.44	26.46	26.93	27.50	21.15	21.64	21.67	22.14	22.70