

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: P1055232

Luminaire Tested: S122R3DR-S675D840-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055232
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: S122R3DR-S675D840-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

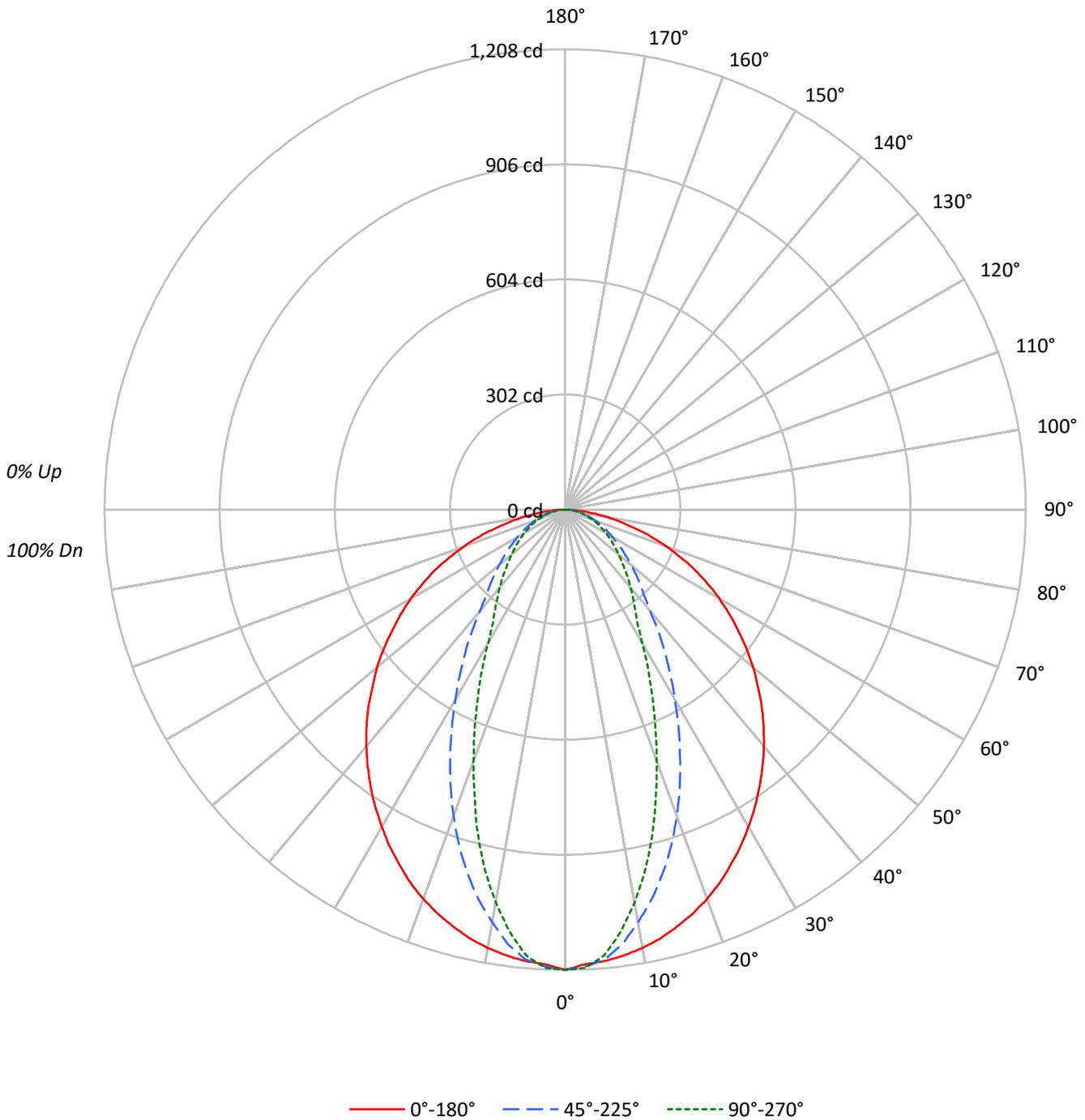
Lumens per Lamp: N/A
Luminaire Lumens: 1826.9 lumens
Efficiency: N/A
Efficacy: 69.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	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°	22883	22883	22883
5°	22624	22548	22337
10°	22478	21156	20146
15°	22225	19393	17331
20°	21928	17246	14152
25°	21490	14905	11295
30°	21032	12592	8814
35°	20554	10533	7403
40°	20055	8542	6594
45°	19535	7467	5900
50°	18961	6608	5388
55°	18312	5972	5004
60°	17680	5434	4668
65°	16843	4981	4393
70°	15610	4642	4138
75°	13820	4216	3916
80°	11794	3971	3633
85°	8130	3522	3282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19535 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	6.1
10°-20°	279.4	15.3
20°-30°	344.3	18.8
30°-40°	330.3	18.1
40°-50°	284.9	15.6
50°-60°	221.1	12.1
60°-70°	151.4	8.3
70°-80°	82.2	4.5
80°-90°	22.5	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°	734.4	40.2
0°-40°	1064.8	58.3
0°-60°	1570.8	86.0
0°-90°	1826.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1826.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1190	1207	1186	1170	1174	113
15°	1133	1099	989	908	884	320
25°	1028	918	713	582	540	474
35°	889	705	455	339	320	556
45°	729	491	279	230	220	562
55°	554	295	181	156	152	496
65°	376	161	111	101	98	371
75°	189	74	58	54	54	202
85°	37	18	16	16	15	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1207.8	1207.8	1207.8	1207.8	1207.8
2.5°	1194.7	1214.9	1200.7	1200.7	1203.8
5°	1189.6	1206.8	1185.6	1170.4	1174.5
7.5°	1180.5	1192.7	1150.2	1117.9	1116.9
10°	1168.4	1169.4	1099.7	1057.3	1047.2
12.5°	1153.3	1137.1	1048.2	984.6	969.5
15°	1133.1	1098.7	988.7	907.9	883.6
17.5°	1111.9	1059.3	925.0	824.1	790.7
20°	1087.6	1011.9	855.4	740.2	701.9
22.5°	1060.4	966.4	785.7	659.4	619.0
25°	1028.0	918.0	713.0	581.7	540.3
27.5°	996.7	868.5	643.3	513.0	470.6
30°	961.4	815.0	575.6	447.4	402.9
32.5°	926.0	760.4	513.0	384.8	351.4
35°	888.7	704.9	455.4	339.3	320.1
37.5°	850.3	650.4	400.9	309.0	291.9
40°	810.9	595.8	345.4	279.7	266.6
42.5°	770.5	542.3	307.0	255.5	243.4
45°	729.1	490.8	278.7	230.2	220.2
47.5°	684.7	439.3	251.5	209.0	200.0
50°	643.3	389.8	224.2	189.9	182.8
52.5°	598.9	341.3	202.0	172.7	166.6
55°	554.4	294.9	180.8	156.5	151.5
57.5°	511.0	250.4	160.6	141.4	137.3
60°	466.6	215.1	143.4	127.2	123.2
62.5°	421.1	186.8	127.2	114.1	110.1
65°	375.7	160.6	111.1	101.0	98.0
67.5°	328.2	135.3	96.9	88.9	86.8
70°	281.8	113.1	83.8	76.7	74.7
72.5°	236.3	91.9	70.7	65.6	63.6
75°	188.8	73.7	57.6	54.5	53.5
77.5°	147.4	57.6	46.5	44.4	43.4
80°	108.1	42.4	36.4	34.3	33.3
82.5°	71.7	29.3	26.3	25.2	24.2
85°	37.4	18.2	16.2	16.2	15.1
87.5°	12.1	8.1	8.1	8.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)