

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: P1055229

Luminaire Tested: S122R3DR-S675D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055229
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-S675D835-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

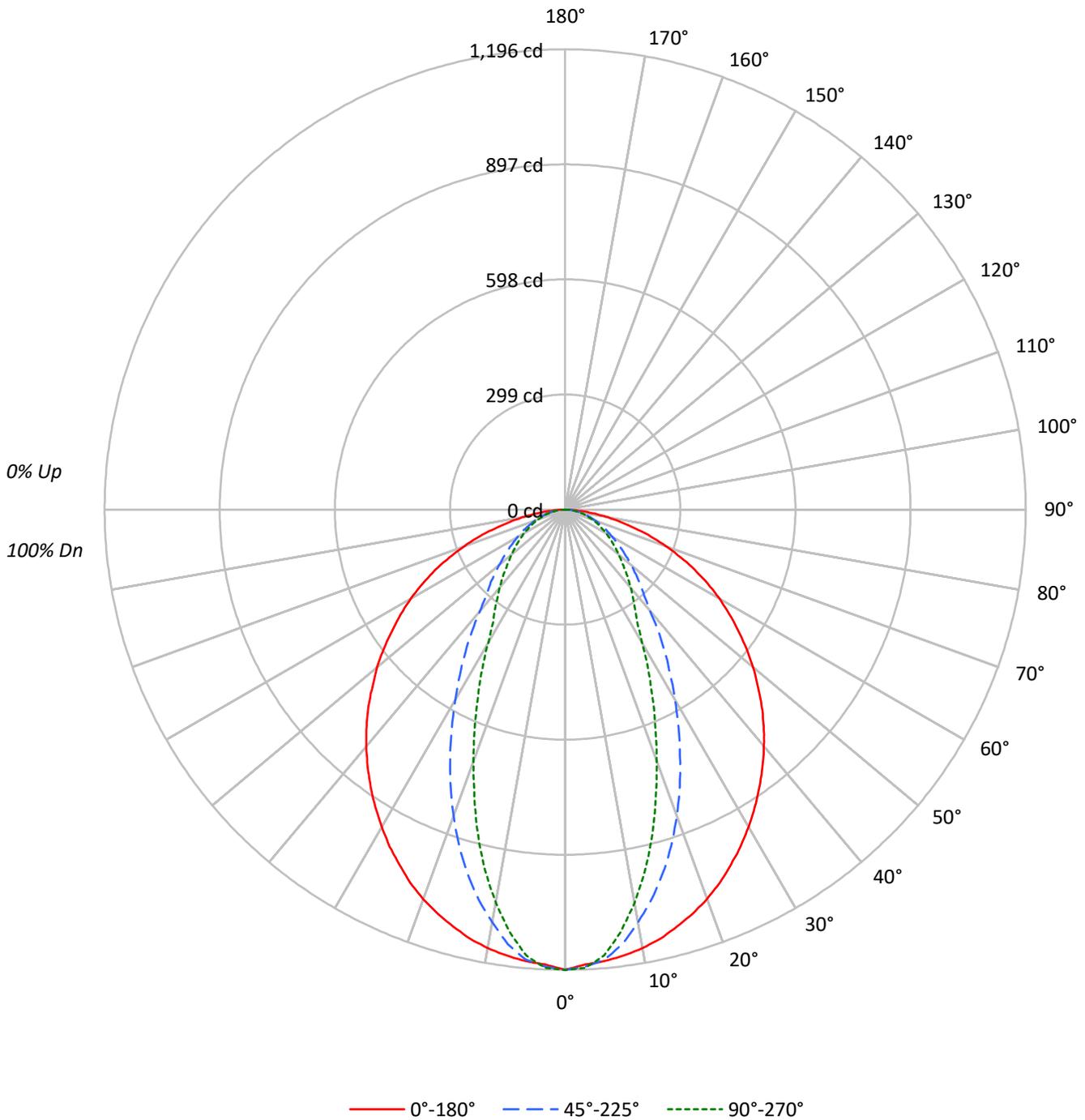
Lumens per Lamp: N/A
Luminaire Lumens: 1809.0 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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				100
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				66
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22659	22659	22659
5°	22403	22327	22118
10°	22259	20950	19950
15°	22007	19202	17162
20°	21714	17077	14012
25°	21281	14759	11184
30°	20827	12470	8729
35°	20353	10431	7332
40°	19860	8458	6529
45°	19345	7395	5841
50°	18775	6543	5335
55°	18134	5913	4955
60°	17506	5381	4623
65°	16677	4931	4348
70°	15455	4598	4099
75°	13689	4172	3880
80°	11674	3928	3600
85°	8043	3478	3261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19345 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.6	6.1
10°-20°	276.7	15.3
20°-30°	341.0	18.8
30°-40°	327.1	18.1
40°-50°	282.2	15.6
50°-60°	218.9	12.1
60°-70°	149.9	8.3
70°-80°	81.4	4.5
80°-90°	22.3	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°	727.3	40.2
0°-40°	1054.4	58.3
0°-60°	1555.4	86.0
0°-90°	1809.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1178	1195	1174	1159	1163	112
15°	1122	1088	979	899	875	316
25°	1018	909	706	576	535	469
35°	880	698	451	336	317	550
45°	722	486	276	228	218	556
55°	549	292	179	155	150	491
65°	372	159	110	100	97	367
75°	187	73	57	54	53	200
85°	37	18	16	16	15	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1196	1196	1196	1196	1196
2.5°	1183	1203	1189	1189	1192
5°	1178	1195	1174	1159	1163
7.5°	1169	1181	1139	1107	1106
10°	1157	1158	1089	1047	1037
12.5°	1142	1126	1038	975	960
15°	1122	1088	979	899	875
17.5°	1101	1049	916	816	783
20°	1077	1002	847	733	695
22.5°	1050	957	778	653	613
25°	1018	909	706	576	535
27.5°	987	860	637	508	466
30°	952	807	570	443	399
32.5°	917	753	508	381	348
35°	880	698	451	336	317
37.5°	842	644	397	306	289
40°	803	590	342	277	264
42.5°	763	537	304	253	241
45°	722	486	276	228	218
47.5°	678	435	249	207	198
50°	637	386	222	188	181
52.5°	593	338	200	171	165
55°	549	292	179	155	150
57.5°	506	248	159	140	136
60°	462	213	142	126	122
62.5°	417	185	126	113	109
65°	372	159	110	100	97
67.5°	325	134	96	88	86
70°	279	112	83	76	74
72.5°	234	91	70	65	63
75°	187	73	57	54	53
77.5°	146	57	46	44	43
80°	107	42	36	34	33
82.5°	71	29	26	25	24
85°	37	18	16	16	15
87.5°	12	8	8	8	7
90°	0	0	0	0	0

(END OF REPORT)