

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: P1056064

Luminaire Tested: S124R3DR-S795D835-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S795D835-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

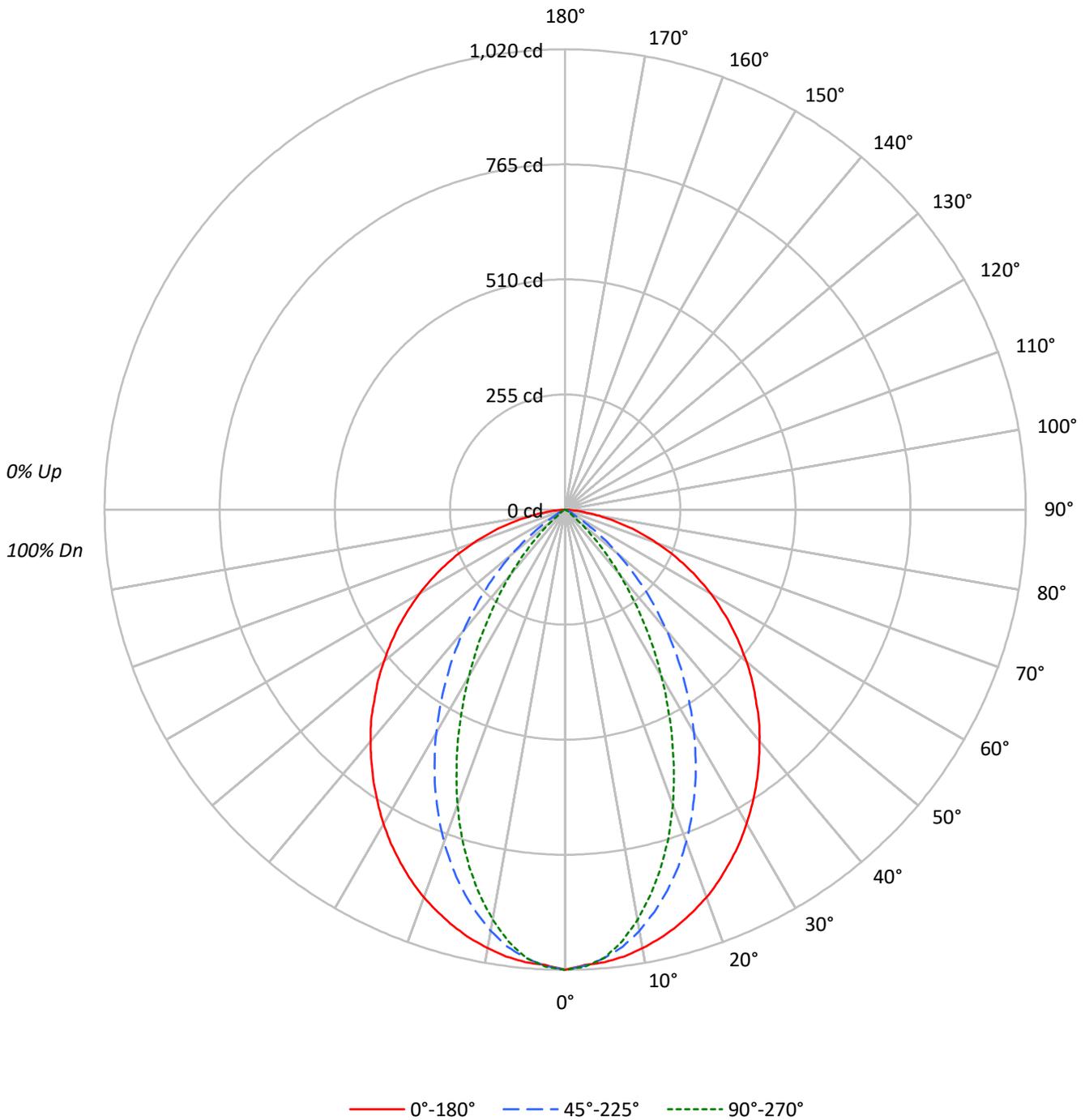
Lumens per Lamp: N/A
Luminaire Lumens: 1425.6 lumens
Efficiency: N/A
Efficacy: 54.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9018	9018	9018
5°	8937	8857	8849
10°	8861	8511	8286
15°	8751	8000	7506
20°	8609	7376	6558
25°	8419	6643	5473
30°	8208	5829	4349
35°	7976	4943	3238
40°	7733	4028	2158
45°	7465	3076	1188
50°	7207	2104	330
55°	6921	1141	216
60°	6578	354	124
65°	6151	230	63
70°	5558	103	26
75°	4782	34	0
80°	3615	0	0
85°	1522	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7465 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.1	6.6
10°-20°	247.0	17.3
20°-30°	319.2	22.4
30°-40°	305.1	21.4
40°-50°	228.2	16.0
50°-60°	135.8	9.5
60°-70°	68.9	4.8
70°-80°	24.0	1.7
80°-90°	3.3	0.2
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°	660.4	46.3
0°-40°	965.5	67.7
0°-60°	1329.4	93.3
0°-90°	1425.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1425.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	1007	1015	998	993	997	95
15°	956	936	874	833	820	269
25°	863	803	681	591	561	397
35°	739	637	458	341	300	462
45°	597	458	246	131	95	462
55°	449	279	74	17	14	401
65°	294	113	11	4	3	291
75°	140	15	1	1	0	149
85°	15	0	0	0	0	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1020	1020	1020	1020	1020
2.5°	1010	1022	1012	1013	1014
5°	1007	1015	998	993	997
7.5°	999	1002	977	964	965
10°	987	984	948	926	923
12.5°	973	963	913	881	874
15°	956	936	874	833	820
17.5°	936	907	831	777	761
20°	915	875	784	717	697
22.5°	890	839	733	654	629
25°	863	803	681	591	561
27.5°	835	764	626	527	492
30°	804	723	571	462	426
32.5°	772	681	514	402	362
35°	739	637	458	341	300
37.5°	705	593	404	283	241
40°	670	548	349	228	187
42.5°	636	503	297	176	138
45°	597	458	246	131	95
47.5°	562	414	197	89	56
50°	524	367	153	52	24
52.5°	486	323	112	23	18
55°	449	279	74	17	14
57.5°	410	235	40	13	10
60°	372	192	20	10	7
62.5°	333	151	16	6	4
65°	294	113	11	4	3
67.5°	255	77	7	2	1
70°	215	47	4	1	1
72.5°	177	24	2	1	1
75°	140	15	1	1	0
77.5°	104	8	1	1	0
80°	71	3	0	0	0
82.5°	41	1	0	0	0
85°	15	0	0	0	0
87.5°	0	0	0	0	0
90°	0	0	0	0	0

(END OF REPORT)