

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P930581

Luminaire Tested: DFN2DS-PN3F0-070DS835-FLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P930581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P333812)
Test Lab: INNOVATION CENTER
Issue Date: 11/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: DFN2DS-PN3F0-070DS835-FLL
Description: 3 foot, Pentagon Define Geo, with Direct Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

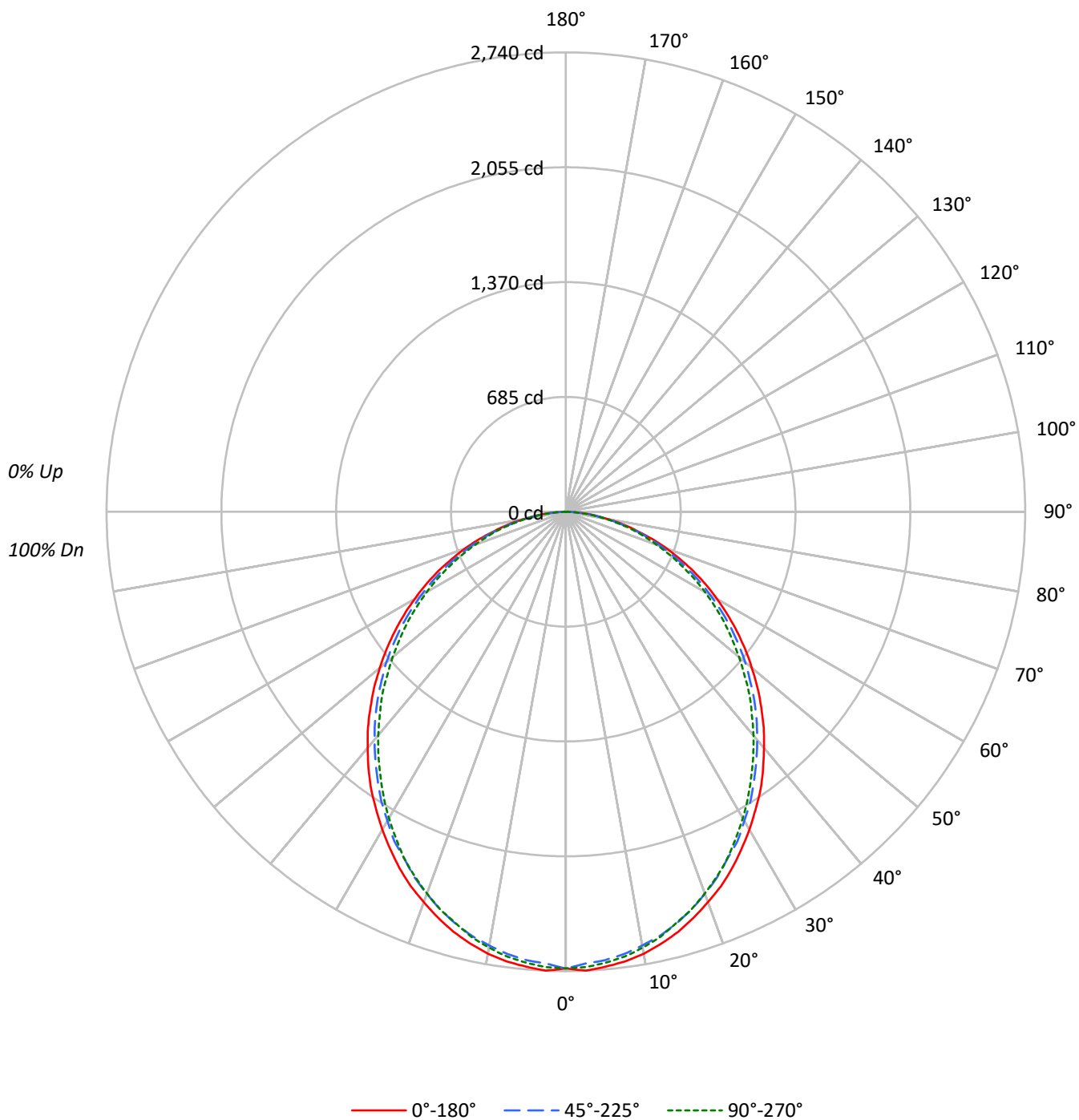
Lumens per Lamp: N/A
Luminaire Lumens: 6930.0 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 3.11' x L: 2.96' x H: 0')
CIE Type: Direct

Input Watts (W): 73.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.946
Total Harmonic Distortion (THDi): 0.132
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P930581

CATALOG NUMBER: DFN2DS-PN3F0-070DS835-FLL

Luminous Intensity Polar Plot



TEST NUMBER: P930581

CATALOG NUMBER: DFN2DS-PN3F0-070DS835-FLL

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	53	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3184	3184	3184
5°	3196	3150	3169
10°	3177	3118	3134
15°	3138	3078	3075
20°	3082	3017	3014
25°	3027	2943	2943
30°	2956	2874	2849
35°	2889	2792	2751
40°	2806	2710	2658
45°	2724	2628	2563
50°	2634	2543	2453
55°	2541	2445	2354
60°	2437	2327	2241
65°	2326	2210	2108
70°	2184	2067	1970
75°	1987	1904	1858
80°	1764	1710	1622
85°	1439	1372	1230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2724 cd/sqm

TEST NUMBER: P930581

CATALOG NUMBER: DFN2DS-PN3F0-070DS835-FLL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.4	3.7
10°-20°	721.3	10.4
20°-30°	1060.0	15.3
30°-40°	1231.1	17.8
40°-50°	1229.6	17.7
50°-60°	1072.2	15.5
60°-70°	792.6	11.4
70°-80°	448.4	6.5
80°-90°	118.4	1.7
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°	2037.7	29.4
0°-40°	3268.8	47.2
0°-60°	5570.6	80.4
0°-90°	6930.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6930.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2724	2724	2724	2724	2724	
5°	2724	2714	2685	2705	2700	259
15°	2593	2577	2543	2554	2541	730
25°	2347	2326	2281	2286	2281	1080
35°	2025	1998	1956	1941	1928	1264
45°	1648	1629	1590	1561	1550	1271
55°	1247	1231	1200	1168	1155	1115
65°	841	825	799	775	762	831
75°	440	435	422	406	411	470
85°	107	105	102	94	92	126
90°	0	0	0	0	0	

TEST NUMBER: P930581

CATALOG NUMBER: DFN2DS-PN3F0-070DS835-FLL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2723.7	2723.7	2723.7	2723.7	2723.7
2.5°	2739.6	2726.5	2697.6	2723.7	2718.7
5°	2723.7	2713.5	2684.6	2705.4	2700.4
7.5°	2705.4	2689.8	2660.9	2682.1	2676.8
10°	2676.8	2658.4	2627.0	2647.9	2640.1
12.5°	2637.3	2621.8	2590.4	2603.4	2598.1
15°	2592.9	2577.3	2543.1	2553.7	2540.6
17.5°	2537.8	2522.3	2488.1	2501.2	2488.1
20°	2477.5	2462.0	2425.3	2433.1	2422.8
22.5°	2417.5	2393.9	2359.7	2359.7	2354.4
25°	2346.7	2325.8	2281.4	2286.4	2281.4
27.5°	2268.0	2249.7	2215.8	2208.0	2194.9
30°	2189.7	2168.5	2129.4	2121.6	2111.0
32.5°	2105.7	2090.2	2048.2	2032.4	2021.8
35°	2024.6	1998.5	1956.5	1940.7	1927.6
37.5°	1932.9	1909.3	1867.3	1849.0	1835.9
40°	1838.7	1817.6	1775.6	1752.3	1741.7
42.5°	1747.0	1725.9	1684.2	1657.8	1642.2
45°	1647.5	1629.2	1589.7	1561.1	1550.5
47.5°	1550.5	1532.2	1490.2	1461.3	1445.8
50°	1448.3	1435.2	1398.5	1361.9	1348.8
52.5°	1348.8	1330.5	1296.6	1267.7	1249.3
55°	1246.8	1231.0	1199.6	1168.2	1155.1
57.5°	1144.6	1131.5	1097.3	1065.9	1055.4
60°	1042.3	1032.0	995.4	966.5	958.7
62.5°	942.8	924.5	898.4	872.3	861.7
65°	840.9	825.0	798.9	775.3	762.2
67.5°	736.1	722.8	699.4	681.1	670.5
70°	639.1	628.6	604.9	586.6	576.3
72.5°	539.6	529.1	516.0	497.7	489.9
75°	439.9	434.9	421.5	406.0	411.3
77.5°	351.0	340.4	335.1	327.3	319.6
80°	262.0	259.3	254.0	246.2	240.9
82.5°	178.1	178.1	175.6	165.1	165.1
85°	107.3	104.8	102.3	94.2	91.7
87.5°	47.2	42.0	36.7	28.9	26.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P930581

CATALOG NUMBER: DFN2DS-PN3F0-070DS835-FLL

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	15.31	16.92	15.67	17.23	17.55	14.86	16.47	15.23	16.79	17.10
	3H	17.06	18.51	17.43	18.84	19.20	16.57	18.02	16.94	18.35	18.71
	4H	17.70	19.07	18.10	19.42	19.80	17.21	18.58	17.61	18.92	19.30
	6H	18.17	19.44	18.58	19.81	20.20	17.67	18.94	18.08	19.30	19.69
	8H	18.31	19.53	18.74	19.91	20.31	17.81	19.02	18.24	19.41	19.81
	12H	18.41	19.57	18.83	19.95	20.38	17.89	19.05	18.32	19.43	19.86
4H	2H	15.87	17.24	16.27	17.58	17.96	15.51	16.88	15.91	17.23	17.61
	3H	17.84	18.99	18.25	19.39	19.79	17.44	18.58	17.84	18.98	19.38
	4H	18.62	19.65	19.05	20.07	20.50	18.19	19.23	18.63	19.64	20.08
	6H	19.22	20.12	19.67	20.56	21.02	18.78	19.69	19.24	20.13	20.58
	8H	19.40	20.25	19.87	20.69	21.16	18.97	19.81	19.43	20.26	20.72
	12H	19.54	20.30	20.02	20.77	21.24	19.08	19.84	19.56	20.32	20.79
8H	4H	18.89	19.74	19.35	20.18	20.65	18.52	19.36	18.98	19.81	20.27
	6H	19.61	20.31	20.10	20.80	21.27	19.22	19.93	19.72	20.42	20.89
	8H	19.87	20.50	20.38	21.00	21.49	19.47	20.10	19.98	20.61	21.10
	12H	20.07	20.62	20.57	21.11	21.67	19.65	20.21	20.16	20.70	21.26
12H	4H	18.92	19.68	19.40	20.15	20.62	18.55	19.31	19.03	19.79	20.26
	6H	19.65	20.28	20.16	20.79	21.28	19.28	19.91	19.79	20.42	20.91
	8H	19.97	20.52	20.47	21.01	21.57	19.59	20.15	20.09	20.64	21.20

END OF REPORT