

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: P930593

Luminaire Tested: DFN2DS-PN3F0-070DS940-FLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P930593
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-PN3F0-070DS940-FLL
Description: 3 foot, Pentagon Define Geo, with Direct Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

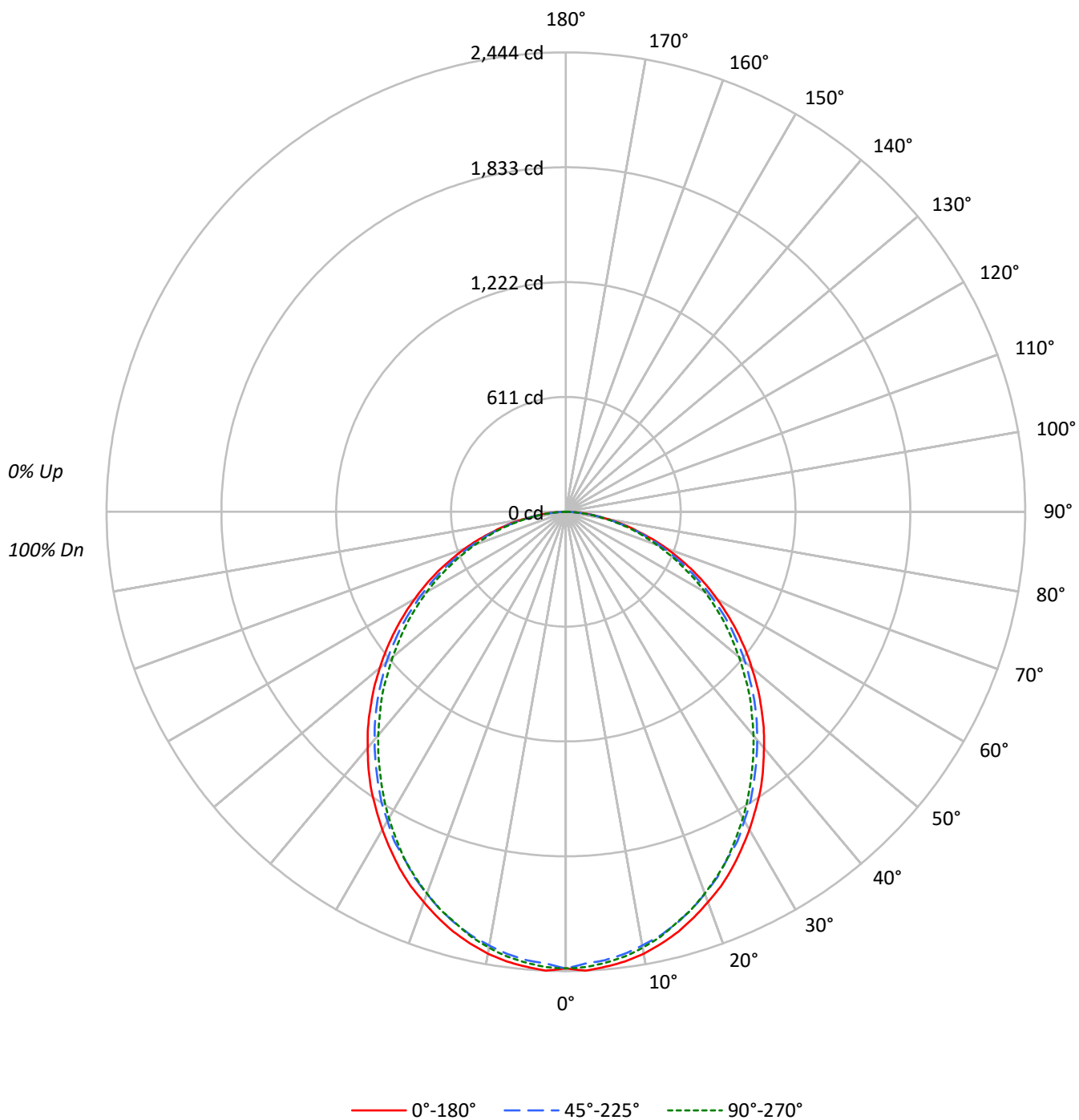
Lumens per Lamp: N/A
Luminaire Lumens: 6181.6 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 3.11' x L: 2.96' x H: 0')
CIE Type: Direct

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: P930593

CATALOG NUMBER: DFN2DS-PN3F0-070DS940-FLL

Luminous Intensity Polar Plot



TEST NUMBER: P930593

CATALOG NUMBER: DFN2DS-PN3F0-070DS940-FLL

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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27		38	32	27		37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2840	2840	2840
5°	2851	2810	2827
10°	2834	2782	2795
15°	2799	2745	2743
20°	2749	2691	2688
25°	2700	2625	2625
30°	2636	2564	2542
35°	2577	2491	2454
40°	2503	2417	2371
45°	2430	2344	2286
50°	2349	2269	2188
55°	2267	2181	2100
60°	2174	2076	1999
65°	2075	1971	1881
70°	1949	1844	1757
75°	1772	1698	1657
80°	1573	1525	1447
85°	1284	1225	1097

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2430 cd/sqm

TEST NUMBER: P930593

CATALOG NUMBER: DFN2DS-PN3F0-070DS940-FLL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.7	3.7
10°-20°	643.4	10.4
20°-30°	945.5	15.3
30°-40°	1098.2	17.8
40°-50°	1096.8	17.7
50°-60°	956.4	15.5
60°-70°	707.0	11.4
70°-80°	400.0	6.5
80°-90°	105.6	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°	1817.6	29.4
0°-40°	2915.8	47.2
0°-60°	4969.0	80.4
0°-90°	6181.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6181.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2430	2430	2430	2430	2430	
5°	2430	2420	2395	2413	2409	231
15°	2313	2299	2268	2278	2266	651
25°	2093	2075	2035	2040	2035	963
35°	1806	1783	1745	1731	1719	1128
45°	1470	1453	1418	1392	1383	1134
55°	1112	1098	1070	1042	1030	994
65°	750	736	713	692	680	742
75°	392	388	376	362	367	419
85°	96	94	91	84	82	112
90°	0	0	0	0	0	

TEST NUMBER: P930593

CATALOG NUMBER: DFN2DS-PN3F0-070DS940-FLL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2429.5	2429.5	2429.5	2429.5	2429.5
2.5°	2443.7	2432.0	2406.3	2429.5	2425.1
5°	2429.5	2420.4	2394.7	2413.2	2408.8
7.5°	2413.2	2399.3	2373.5	2392.4	2387.7
10°	2387.7	2371.3	2343.3	2361.9	2355.0
12.5°	2352.5	2338.6	2310.6	2322.2	2317.5
15°	2312.9	2299.0	2268.4	2277.9	2266.2
17.5°	2263.7	2249.9	2219.4	2231.1	2219.4
20°	2209.9	2196.1	2163.4	2170.3	2161.1
22.5°	2156.4	2135.4	2104.9	2104.9	2100.1
25°	2093.3	2074.6	2035.0	2039.5	2035.0
27.5°	2023.1	2006.7	1976.5	1969.5	1957.9
30°	1953.2	1934.3	1899.4	1892.5	1883.0
32.5°	1878.3	1864.5	1827.0	1812.9	1803.4
35°	1805.9	1782.7	1745.2	1731.1	1719.4
37.5°	1724.1	1703.1	1665.6	1649.3	1637.6
40°	1640.1	1621.3	1583.8	1563.1	1553.6
42.5°	1558.3	1539.5	1502.3	1478.8	1464.8
45°	1469.6	1453.2	1418.0	1392.5	1383.0
47.5°	1383.0	1366.7	1329.3	1303.5	1289.7
50°	1291.9	1280.2	1247.5	1214.8	1203.1
52.5°	1203.1	1186.8	1156.6	1130.8	1114.4
55°	1112.1	1098.1	1070.0	1042.0	1030.3
57.5°	1021.0	1009.3	978.8	950.8	941.4
60°	929.7	920.5	887.9	862.1	855.2
62.5°	841.0	824.7	801.4	778.1	768.6
65°	750.1	735.9	712.6	691.6	679.9
67.5°	656.6	644.7	623.9	607.5	598.1
70°	570.1	560.7	539.6	523.2	514.1
72.5°	481.3	472.0	460.3	443.9	437.0
75°	392.4	387.9	376.0	362.2	366.9
77.5°	313.1	303.6	298.9	292.0	285.1
80°	233.7	231.3	226.6	219.6	214.9
82.5°	158.9	158.9	156.6	147.3	147.3
85°	95.7	93.5	91.3	84.0	81.8
87.5°	42.1	37.5	32.7	25.8	23.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P930593

CATALOG NUMBER: DFN2DS-PN3F0-070DS940-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	14.91	16.52	15.27	16.83	17.15	14.46	16.08	14.83	16.39	16.70
	3H	16.66	18.11	17.04	18.44	18.80	16.17	17.62	16.55	17.95	18.31
	4H	17.31	18.67	17.70	19.02	19.40	16.81	18.18	17.21	18.53	18.90
	6H	17.77	19.04	18.19	19.41	19.80	17.27	18.54	17.68	18.91	19.30
	8H	17.92	19.13	18.34	19.52	19.92	17.42	18.63	17.84	19.01	19.41
	12H	18.01	19.17	18.44	19.55	19.98	17.50	18.66	17.93	19.04	19.47
4H	2H	15.47	16.84	15.87	17.19	17.56	15.12	16.49	15.52	16.83	17.21
	3H	17.44	18.59	17.85	18.99	19.39	17.04	18.18	17.45	18.58	18.98
	4H	18.22	19.26	18.65	19.67	20.11	17.80	18.83	18.23	19.25	19.68
	6H	18.82	19.72	19.27	20.16	20.62	18.39	19.29	18.84	19.73	20.19
	8H	19.01	19.85	19.47	20.30	20.76	18.57	19.42	19.03	19.86	20.32
	12H	19.14	19.90	19.62	20.38	20.84	18.69	19.45	19.17	19.92	20.39
8H	4H	18.49	19.34	18.96	19.78	20.25	18.12	18.97	18.58	19.41	19.87
	6H	19.21	19.91	19.70	20.40	20.88	18.83	19.53	19.32	20.02	20.49
	8H	19.47	20.10	19.98	20.61	21.09	19.08	19.71	19.59	20.21	20.70
	12H	19.67	20.23	20.18	20.72	21.28	19.26	19.81	19.76	20.30	20.86
12H	4H	18.52	19.28	19.00	19.76	20.23	18.16	18.92	18.64	19.39	19.86
	6H	19.25	19.89	19.76	20.39	20.88	18.89	19.52	19.40	20.02	20.51
	8H	19.57	20.13	20.08	20.62	21.18	19.19	19.75	19.70	20.24	20.80

END OF REPORT