

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: P930553

Luminaire Tested: DFN2DS-PN3F0-050DS930-FLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P930553
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-PN3F0-050DS930-FLL
Description: 3 foot, Pentagon Define Geo, with Direct Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

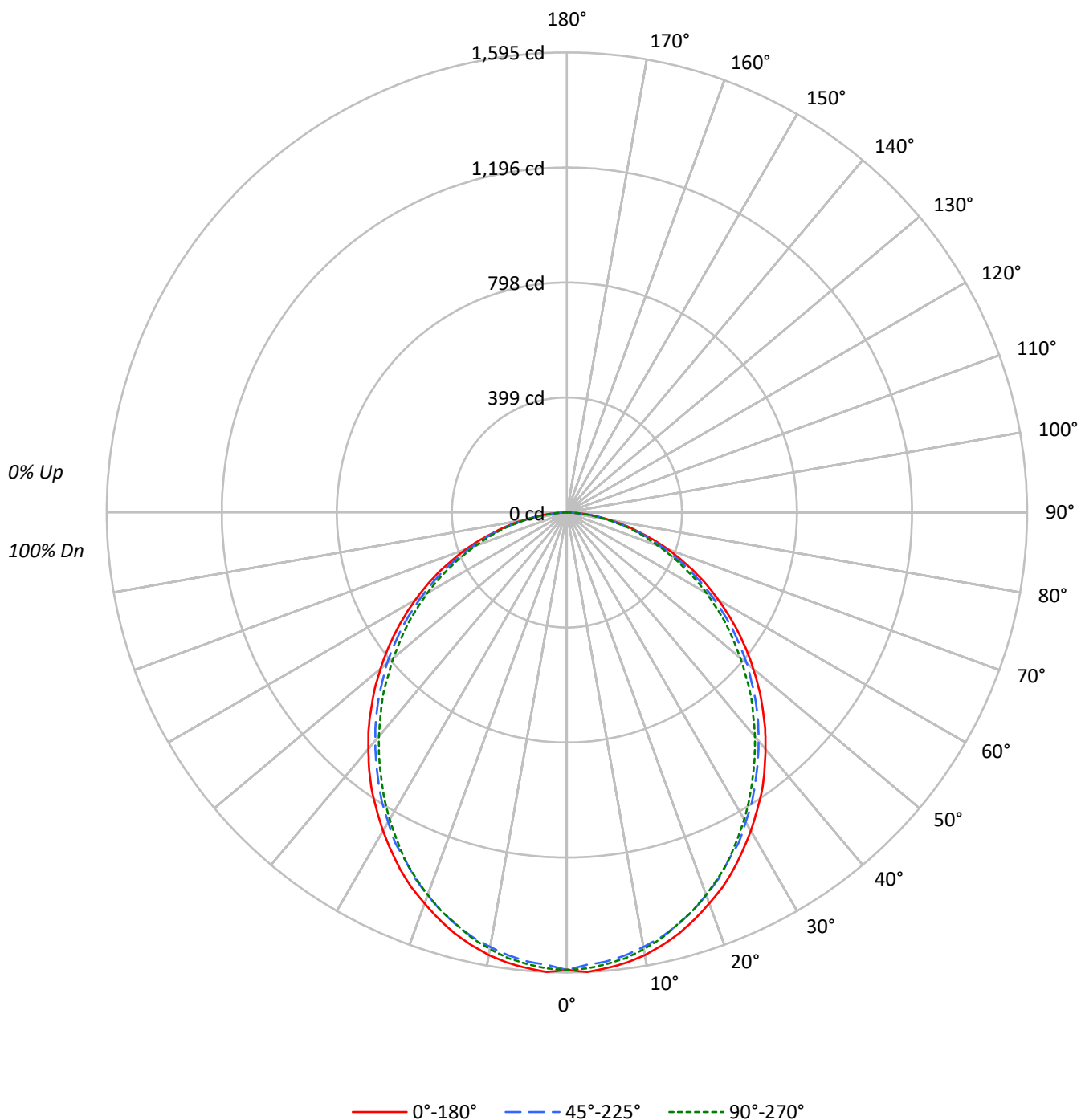
Lumens per Lamp: N/A
Luminaire Lumens: 4034.2 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 3.11' x L: 2.96' x H: 0')
CIE Type: Direct

Input Watts (W): 49.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9613
Total Harmonic Distortion (THDi): 0.083
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P930553

CATALOG NUMBER: DFN2DS-PN3F0-050DS930-FLL

Luminous Intensity Polar Plot



TEST NUMBER: P930553

CATALOG NUMBER: DFN2DS-PN3F0-050DS930-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°	1854	1854	1854
5°	1861	1834	1845
10°	1850	1815	1824
15°	1827	1792	1790
20°	1794	1756	1755
25°	1762	1713	1713
30°	1721	1673	1659
35°	1682	1625	1601
40°	1633	1577	1547
45°	1586	1530	1492
50°	1533	1481	1428
55°	1479	1423	1371
60°	1419	1355	1305
65°	1354	1286	1227
70°	1271	1204	1147
75°	1157	1108	1081
80°	1027	995	944
85°	837	798	716

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1586 cd/sqm

TEST NUMBER: P930553

CATALOG NUMBER: DFN2DS-PN3F0-050DS930-FLL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.2	3.7
10°-20°	419.9	10.4
20°-30°	617.1	15.3
30°-40°	716.7	17.8
40°-50°	715.8	17.7
50°-60°	624.2	15.5
60°-70°	461.4	11.4
70°-80°	261.0	6.5
80°-90°	68.9	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°	1186.2	29.4
0°-40°	1902.9	47.2
0°-60°	3242.9	80.4
0°-90°	4034.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4034.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1586	1586	1586	1586	1586	
5°	1586	1580	1563	1575	1572	151
15°	1509	1500	1480	1487	1479	425
25°	1366	1354	1328	1331	1328	629
35°	1179	1163	1139	1130	1122	736
45°	959	948	925	909	903	740
55°	726	717	698	680	672	649
65°	490	480	465	451	444	484
75°	256	253	245	236	239	273
85°	62	61	60	55	53	73
90°	0	0	0	0	0	

TEST NUMBER: P930553

CATALOG NUMBER: DFN2DS-PN3F0-050DS930-FLL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1585.6	1585.6	1585.6	1585.6	1585.6
2.5°	1594.8	1587.2	1570.4	1585.6	1582.7
5°	1585.6	1579.6	1562.8	1574.9	1572.1
7.5°	1574.9	1565.9	1549.1	1561.4	1558.3
10°	1558.3	1547.6	1529.3	1541.4	1536.9
12.5°	1535.3	1526.3	1508.0	1515.6	1512.5
15°	1509.4	1500.3	1480.4	1486.6	1479.0
17.5°	1477.4	1468.3	1448.4	1456.0	1448.4
20°	1442.3	1433.3	1411.9	1416.4	1410.4
22.5°	1407.3	1393.6	1373.7	1373.7	1370.6
25°	1366.1	1354.0	1328.0	1331.0	1328.0
27.5°	1320.3	1309.6	1289.9	1285.3	1277.8
30°	1274.7	1262.4	1239.6	1235.1	1228.9
32.5°	1225.8	1216.8	1192.3	1183.1	1177.0
35°	1178.6	1163.4	1139.0	1129.8	1122.2
37.5°	1125.2	1111.5	1087.0	1076.4	1068.8
40°	1070.4	1058.1	1033.7	1020.1	1013.9
42.5°	1017.0	1004.7	980.4	965.0	956.0
45°	959.1	948.4	925.4	908.8	902.6
47.5°	902.6	891.9	867.6	850.7	841.7
50°	843.1	835.5	814.2	792.8	785.2
52.5°	785.2	774.5	754.8	738.0	727.3
55°	725.8	716.6	698.3	680.0	672.5
57.5°	666.3	658.7	638.8	620.5	614.3
60°	606.8	600.8	579.5	562.6	558.1
62.5°	548.9	538.2	523.0	507.7	501.6
65°	489.5	480.3	465.0	451.3	443.7
67.5°	428.5	420.8	407.2	396.5	390.3
70°	372.0	365.9	352.2	341.5	335.5
72.5°	314.2	308.0	300.4	289.7	285.2
75°	256.1	253.1	245.4	236.4	239.4
77.5°	204.3	198.1	195.1	190.5	186.1
80°	152.6	150.9	147.8	143.4	140.3
82.5°	103.7	103.7	102.2	96.1	96.1
85°	62.4	61.0	59.5	54.8	53.4
87.5°	27.5	24.4	21.4	16.8	15.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P930553

CATALOG NUMBER: DFN2DS-PN3F0-050DS930-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	13.43	15.04	13.79	15.35	15.67	12.98	14.59	13.35	14.91	15.22
	3H	15.18	16.63	15.55	16.96	17.32	14.69	16.14	15.06	16.47	16.83
	4H	15.82	17.19	16.22	17.54	17.92	15.33	16.70	15.73	17.04	17.42
	6H	16.29	17.56	16.70	17.93	18.32	15.79	17.06	16.20	17.42	17.82
	8H	16.44	17.65	16.86	18.04	18.43	15.93	17.14	16.36	17.53	17.93
	12H	16.53	17.69	16.95	18.07	18.50	16.01	17.17	16.44	17.56	17.98
4H	2H	13.99	15.36	14.39	15.70	16.08	13.63	15.00	14.03	15.35	15.73
	3H	15.96	17.11	16.37	17.51	17.91	15.56	16.70	15.96	17.10	17.50
	4H	16.74	17.77	17.17	18.19	18.62	16.31	17.35	16.75	17.76	18.20
	6H	17.34	18.24	17.79	18.68	19.14	16.90	17.81	17.36	18.25	18.70
	8H	17.52	18.37	17.99	18.81	19.28	17.09	17.93	17.55	18.38	18.84
	12H	17.66	18.42	18.14	18.89	19.36	17.20	17.96	17.68	18.44	18.91
8H	4H	17.01	17.86	17.47	18.30	18.77	16.64	17.48	17.10	17.93	18.39
	6H	17.73	18.43	18.22	18.92	19.39	17.34	18.05	17.84	18.54	19.01
	8H	17.99	18.62	18.50	19.12	19.61	17.59	18.22	18.10	18.73	19.22
	12H	18.19	18.74	18.69	19.23	19.79	17.77	18.33	18.28	18.82	19.38
12H	4H	17.04	17.80	17.52	18.27	18.74	16.67	17.43	17.15	17.91	18.38
	6H	17.77	18.40	18.28	18.91	19.40	17.40	18.04	17.91	18.54	19.03
	8H	18.09	18.64	18.59	19.13	19.69	17.71	18.27	18.21	18.76	19.32