

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: P931366

Luminaire Tested: DFN2DS-TR3F0-050DS935-RLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P931366
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P333882)
Test Lab: INNOVATION CENTER
Issue Date: 11/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: DFN2DS-TR3F0-050DS935-RLL
Description: 3 foot, Triangle Define Geo, with Direct 1in Regressed Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

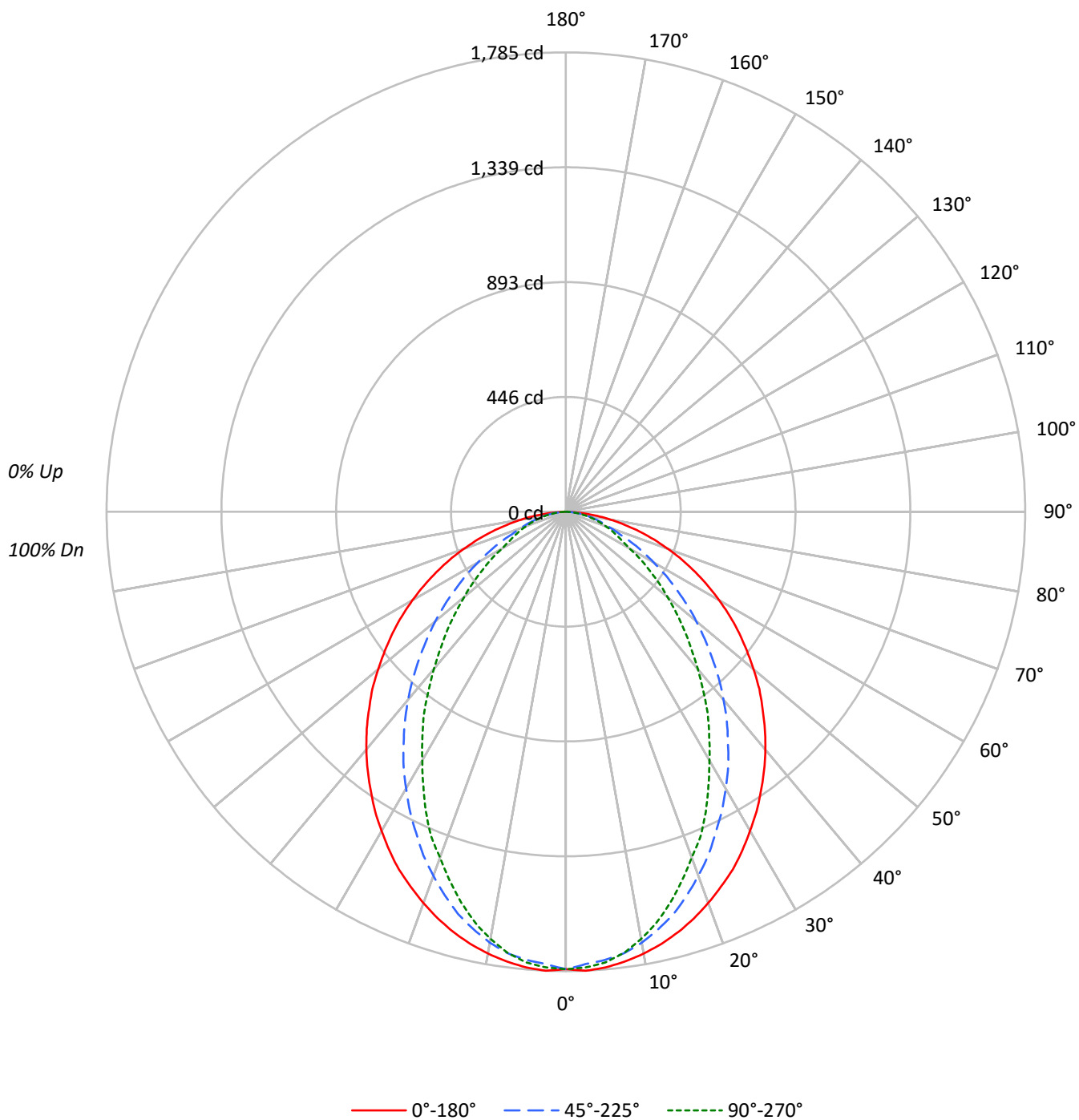
Lumens per Lamp: N/A
Luminaire Lumens: 3655.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 3.16' x L: 2.74' x H: 0')
CIE Type: Direct

Input Watts (W): 49.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9933
Total Harmonic Distortion (THDi): 0.066
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P931366

CATALOG NUMBER: DFN2DS-TR3F0-050DS935-RLL

Luminous Intensity Polar Plot



TEST NUMBER: P931366

CATALOG NUMBER: DFN2DS-TR3F0-050DS935-RLL

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	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51
8	64	51	43	38	62	51	43	37	49	42	37		48	42	37		47
9	60	47	39	34	59	47	39	34	46	39	34		44	38	34		44
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2215	2215	2215
5°	2223	2187	2199
10°	2206	2151	2133
15°	2181	2087	2027
20°	2146	1996	1896
25°	2110	1893	1769
30°	2060	1787	1606
35°	2011	1671	1463
40°	1962	1551	1298
45°	1905	1417	1148
50°	1846	1282	1001
55°	1785	1135	860
60°	1715	982	714
65°	1636	825	650
70°	1541	679	598
75°	1425	620	558
80°	1258	553	508
85°	988	436	436

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1905 cd/sqm

TEST NUMBER: P931366

CATALOG NUMBER: DFN2DS-TR3F0-050DS935-RLL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	4.6
10°-20°	457.2	12.5
20°-30°	641.9	17.6
30°-40°	699.8	19.1
40°-50°	643.2	17.6
50°-60°	505.1	13.8
60°-70°	328.8	9.0
70°-80°	169.3	4.6
80°-90°	43.2	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°	1265.8	34.6
0°-40°	1965.5	53.8
0°-60°	3113.8	85.2
0°-90°	3655.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3655.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1777	1777	1777	1777	1777	
5°	1777	1769	1748	1763	1758	169
15°	1690	1673	1618	1588	1571	476
25°	1534	1483	1377	1311	1287	706
35°	1322	1240	1099	997	962	827
45°	1081	973	804	690	651	835
55°	822	696	523	426	396	734
65°	555	425	280	225	220	550
75°	296	183	129	117	116	313
85°	69	35	30	30	30	83
90°	0	0	0	0	0	

TEST NUMBER: P931366

CATALOG NUMBER: DFN2DS-TR3F0-050DS935-RLL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1777.2	1777.2	1777.2	1777.2	1777.2
2.5°	1785.2	1777.2	1759.5	1775.6	1772.4
5°	1777.2	1769.2	1748.2	1762.7	1757.9
7.5°	1762.7	1753.1	1730.6	1736.9	1728.9
10°	1743.4	1732.1	1700.0	1695.1	1685.5
12.5°	1719.3	1704.9	1661.3	1651.8	1634.0
15°	1690.3	1672.6	1618.0	1587.5	1571.4
17.5°	1656.5	1630.8	1563.2	1527.9	1502.1
20°	1618.0	1585.8	1505.3	1465.3	1429.8
22.5°	1576.2	1539.1	1445.8	1391.2	1367.1
25°	1534.3	1482.8	1376.7	1310.8	1286.6
27.5°	1484.5	1429.8	1312.4	1236.8	1199.8
30°	1431.5	1370.2	1241.6	1159.6	1116.1
32.5°	1380.0	1305.9	1174.2	1077.6	1037.3
35°	1322.1	1240.0	1098.6	997.2	961.7
37.5°	1265.7	1177.3	1027.8	916.7	876.6
40°	1206.2	1109.8	953.7	839.5	797.7
42.5°	1145.2	1042.2	879.8	760.7	720.6
45°	1080.8	973.0	804.2	689.9	651.3
47.5°	1019.7	905.6	731.9	617.6	582.2
50°	952.2	838.0	661.1	550.0	516.3
52.5°	886.1	765.5	593.5	487.4	456.8
55°	821.8	696.3	522.6	426.2	395.7
57.5°	755.9	627.3	460.0	370.0	344.2
60°	688.3	559.7	394.0	312.1	286.3
62.5°	622.5	493.8	337.7	260.6	247.8
65°	554.9	424.6	279.8	225.2	220.3
67.5°	490.5	360.3	225.2	197.8	193.0
70°	423.0	297.6	186.5	170.5	164.0
72.5°	358.7	239.6	156.0	143.2	139.9
75°	295.9	183.3	128.7	117.4	115.8
77.5°	233.2	130.2	101.4	94.9	91.6
80°	175.3	93.3	77.1	70.8	70.8
82.5°	122.2	62.8	53.1	49.8	49.8
85°	69.1	35.3	30.5	30.5	30.5
87.5°	25.8	12.8	12.8	11.3	11.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P931366

CATALOG NUMBER: DFN2DS-TR3F0-050DS935-RLL

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	14.00	15.52	14.36	15.83	16.15	9.96	11.48	10.32	11.79	12.11
	3H	15.76	17.13	16.14	17.46	17.82	11.22	12.59	11.60	12.92	13.28
	4H	16.43	17.71	16.83	18.06	18.44	11.72	13.01	12.12	13.35	13.73
	6H	16.92	18.10	17.33	18.47	18.86	12.11	13.29	12.52	13.66	14.05
	8H	17.08	18.21	17.51	18.60	19.00	12.23	13.36	12.66	13.75	14.15
	12H	17.19	18.26	17.62	18.65	19.08	12.31	13.39	12.74	13.77	14.20
4H	2H	14.10	15.38	14.50	15.73	16.11	10.65	11.93	11.05	12.28	12.66
	3H	16.03	17.10	16.45	17.50	17.90	12.10	13.16	12.51	13.56	13.96
	4H	16.78	17.74	17.22	18.16	18.59	12.70	13.65	13.13	14.07	14.51
	6H	17.38	18.21	17.83	18.65	19.11	13.18	14.02	13.64	14.46	14.92
	8H	17.59	18.37	18.05	18.81	19.28	13.35	14.12	13.81	14.57	15.03
	12H	17.74	18.44	18.23	18.92	19.39	13.46	14.16	13.94	14.64	15.11
8H	4H	16.81	17.59	17.27	18.03	18.50	13.05	13.83	13.51	14.27	14.74
	6H	17.45	18.09	17.94	18.58	19.06	13.64	14.28	14.13	14.77	15.25
	8H	17.70	18.27	18.21	18.78	19.27	13.86	14.43	14.37	14.94	15.43
	12H	17.90	18.41	18.41	18.90	19.47	14.04	14.55	14.55	15.04	15.60
12H	4H	16.79	17.49	17.27	17.97	18.44	13.09	13.79	13.58	14.27	14.74
	6H	17.43	18.00	17.94	18.51	19.00	13.70	14.28	14.21	14.79	15.27
	8H	17.71	18.22	18.22	18.71	19.28	13.97	14.48	14.48	14.97	15.54