

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: P931255

Luminaire Tested: DFN2DS-TR2F0-030DS930-FLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P931255
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-TR2F0-030DS930-FLL
Description: 2 foot, Triangle Define Geo, with Direct Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

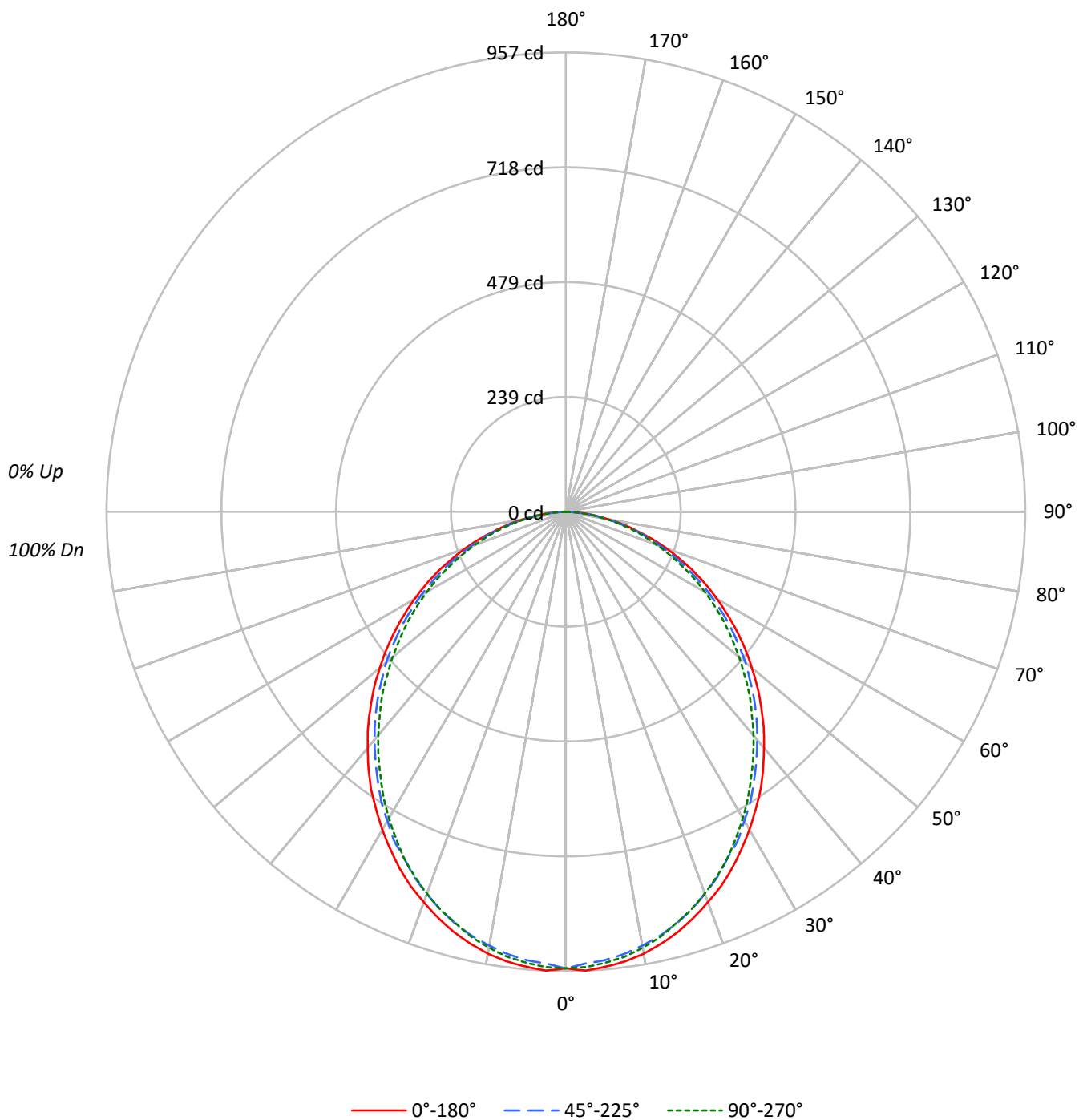
Lumens per Lamp: N/A
Luminaire Lumens: 2420.6 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 2.36' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 27.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9951
Total Harmonic Distortion (THDi): 0.07
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P931255

CATALOG NUMBER: DFN2DS-TR2F0-030DS930-FLL

Luminous Intensity Polar Plot



TEST NUMBER: P931255

CATALOG NUMBER: DFN2DS-TR2F0-030DS930-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°	2122	2122	2122
5°	2130	2099	2112
10°	2118	2078	2089
15°	2091	2051	2049
20°	2054	2011	2009
25°	2017	1961	1961
30°	1970	1916	1899
35°	1926	1861	1833
40°	1870	1806	1771
45°	1815	1752	1708
50°	1755	1695	1635
55°	1694	1629	1569
60°	1624	1551	1494
65°	1550	1473	1405
70°	1456	1378	1313
75°	1324	1269	1238
80°	1175	1139	1082
85°	960	914	819

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 1815 cd/sqm

TEST NUMBER: P931255

CATALOG NUMBER: DFN2DS-TR2F0-030DS930-FLL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.5	3.7
10°-20°	251.9	10.4
20°-30°	370.2	15.3
30°-40°	430.0	17.8
40°-50°	429.5	17.7
50°-60°	374.5	15.5
60°-70°	276.9	11.4
70°-80°	156.6	6.5
80°-90°	41.3	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°	711.7	29.4
0°-40°	1141.7	47.2
0°-60°	1945.8	80.4
0°-90°	2420.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2420.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	951	951	951	951	951	
5°	951	948	938	945	943	90
15°	906	900	888	892	887	255
25°	820	812	797	799	797	377
35°	707	698	683	678	673	442
45°	576	569	555	545	542	444
55°	436	430	419	408	404	389
65°	294	288	279	271	266	290
75°	154	152	147	142	144	164
85°	38	37	36	33	32	44
90°	0	0	0	0	0	

TEST NUMBER: P931255

CATALOG NUMBER: DFN2DS-TR2F0-030DS930-FLL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	951.3	951.3	951.3	951.3	951.3
2.5°	956.9	952.3	942.2	951.3	949.6
5°	951.3	947.8	937.7	945.0	943.2
7.5°	945.0	939.5	929.4	936.8	935.0
10°	935.0	928.5	917.6	924.9	922.2
12.5°	921.2	915.7	904.8	909.3	907.5
15°	905.6	900.2	888.3	891.9	887.4
17.5°	886.4	881.0	869.0	873.6	869.0
20°	865.4	859.9	847.1	849.8	846.2
22.5°	844.4	836.2	824.2	824.2	822.3
25°	819.6	812.4	796.8	798.6	796.8
27.5°	792.2	785.7	773.9	771.2	766.7
30°	764.8	757.5	743.8	741.0	737.3
32.5°	735.5	730.1	715.4	709.9	706.2
35°	707.2	698.0	683.4	677.8	673.3
37.5°	675.1	666.9	652.2	645.8	641.2
40°	642.2	634.9	620.2	612.1	608.4
42.5°	610.2	602.9	588.3	579.1	573.6
45°	575.5	569.0	555.3	545.2	541.6
47.5°	541.6	535.2	520.5	510.4	505.0
50°	505.9	501.3	488.5	475.7	471.2
52.5°	471.2	464.7	452.9	442.8	436.4
55°	435.5	430.0	419.0	408.1	403.5
57.5°	399.8	395.2	383.3	372.3	368.6
60°	364.1	360.5	347.7	337.6	334.9
62.5°	329.3	322.9	313.8	304.6	301.0
65°	293.7	288.2	279.1	270.8	266.3
67.5°	257.1	252.5	244.3	237.9	234.2
70°	223.2	219.6	211.3	204.9	201.3
72.5°	188.5	184.8	180.2	173.8	171.1
75°	153.6	151.9	147.3	141.8	143.7
77.5°	122.6	118.9	117.0	114.3	111.7
80°	91.5	90.5	88.7	86.0	84.2
82.5°	62.2	62.2	61.4	57.6	57.6
85°	37.5	36.6	35.7	32.9	32.0
87.5°	16.5	14.7	12.8	10.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P931255

CATALOG NUMBER: DFN2DS-TR2F0-030DS930-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	13.90	15.51	14.26	15.82	16.14	13.45	15.06	13.82	15.38	15.69
	3H	15.65	17.10	16.02	17.43	17.79	15.16	16.61	15.53	16.94	17.30
	4H	16.29	17.66	16.69	18.01	18.39	15.80	17.17	16.20	17.51	17.89
	6H	16.76	18.03	17.17	18.40	18.79	16.26	17.53	16.67	17.89	18.29
	8H	16.90	18.12	17.33	18.50	18.90	16.40	17.61	16.83	18.00	18.40
	12H	17.00	18.16	17.42	18.54	18.97	16.48	17.64	16.91	18.02	18.45
4H	2H	14.46	15.83	14.86	16.17	16.55	14.10	15.47	14.50	15.82	16.20
	3H	16.43	17.58	16.84	17.98	18.38	16.03	17.17	16.43	17.57	17.97
	4H	17.21	18.24	17.64	18.66	19.09	16.78	17.82	17.22	18.23	18.67
	6H	17.81	18.71	18.26	19.15	19.61	17.37	18.28	17.83	18.72	19.17
	8H	17.99	18.84	18.45	19.28	19.75	17.56	18.40	18.02	18.85	19.31
	12H	18.13	18.89	18.61	19.36	19.83	17.67	18.43	18.15	18.91	19.38
8H	4H	17.48	18.33	17.94	18.77	19.24	17.11	17.95	17.57	18.40	18.86
	6H	18.20	18.90	18.69	19.39	19.86	17.81	18.52	18.31	19.01	19.48
	8H	18.46	19.09	18.96	19.59	20.08	18.06	18.69	18.57	19.20	19.69
	12H	18.66	19.21	19.16	19.70	20.26	18.24	18.80	18.75	19.29	19.85
12H	4H	17.51	18.27	17.99	18.74	19.21	17.14	17.90	17.62	18.38	18.85
	6H	18.24	18.87	18.75	19.38	19.87	17.87	18.51	18.38	19.01	19.50
	8H	18.56	19.11	19.06	19.60	20.16	18.18	18.74	18.68	19.23	19.79