

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: P931245

Luminaire Tested: DFN2DS-TR2F0-030DS830-FLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P931245
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-TR2F0-030DS830-FLL
Description: 2 foot, Triangle Define Geo, with Direct Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

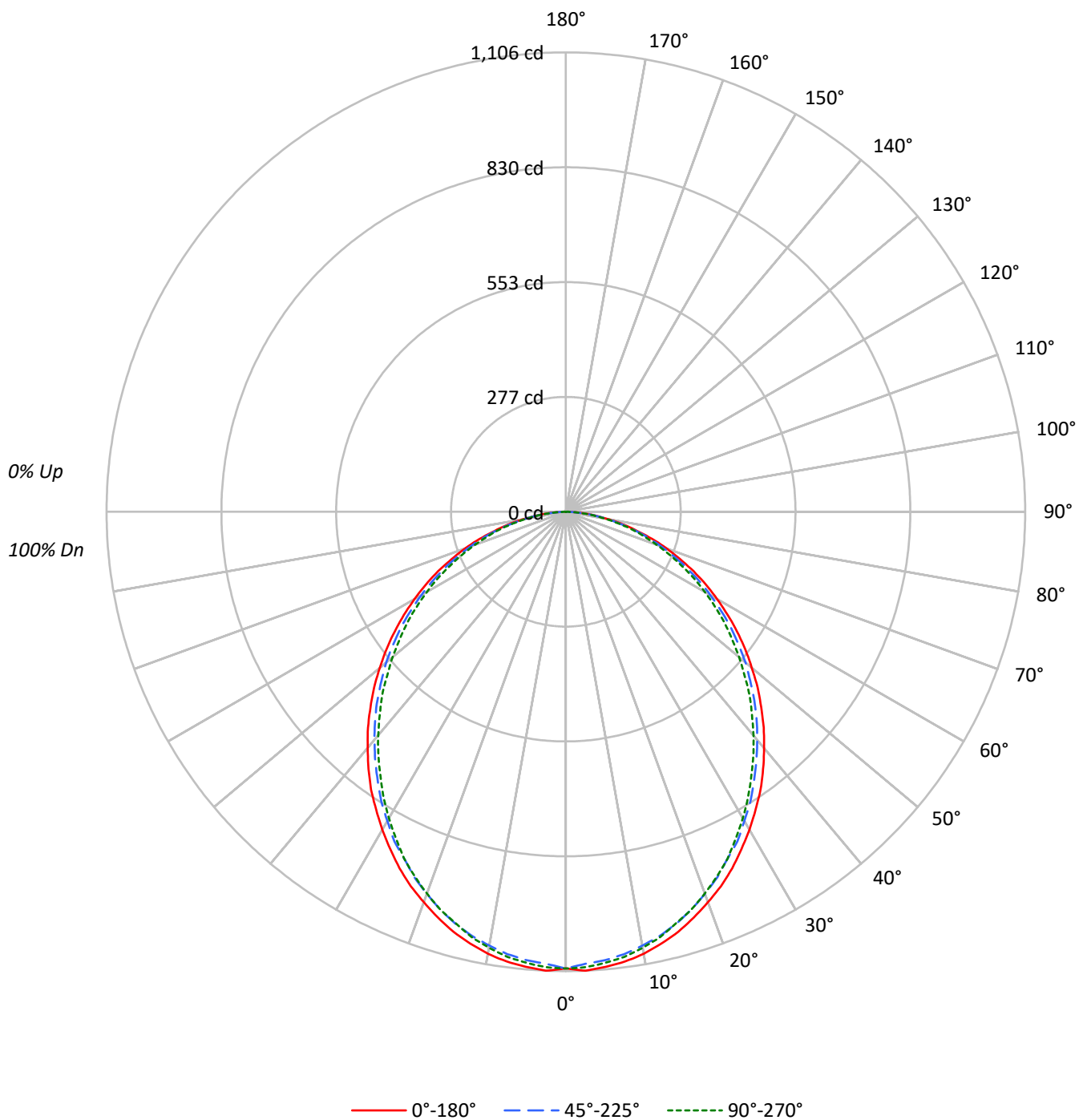
Lumens per Lamp: N/A
Luminaire Lumens: 2797.8 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 2.36' x L: 2.04' x H: 0')
CIE Type: Direct

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: P931245

CATALOG NUMBER: DFN2DS-TR2F0-030DS830-FLL

Luminous Intensity Polar Plot



TEST NUMBER: P931245

CATALOG NUMBER: DFN2DS-TR2F0-030DS830-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°	2453	2453	2453
5°	2462	2427	2441
10°	2448	2402	2414
15°	2417	2371	2368
20°	2374	2324	2322
25°	2332	2267	2267
30°	2277	2214	2195
35°	2226	2151	2119
40°	2161	2087	2047
45°	2098	2024	1975
50°	2029	1959	1890
55°	1958	1883	1814
60°	1877	1793	1727
65°	1792	1702	1624
70°	1683	1593	1518
75°	1531	1467	1431
80°	1359	1317	1250
85°	1108	1057	947

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2098 cd/sqm

TEST NUMBER: P931245

CATALOG NUMBER: DFN2DS-TR2F0-030DS830-FLL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.5	3.7
10°-20°	291.2	10.4
20°-30°	427.9	15.3
30°-40°	497.0	17.8
40°-50°	496.4	17.7
50°-60°	432.9	15.5
60°-70°	320.0	11.4
70°-80°	181.1	6.5
80°-90°	47.8	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°	822.6	29.4
0°-40°	1319.7	47.2
0°-60°	2249.0	80.4
0°-90°	2797.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2797.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1100	1100	1100	1100	1100	
5°	1100	1096	1084	1092	1090	104
15°	1047	1040	1027	1031	1026	295
25°	947	939	921	923	921	436
35°	817	807	790	784	778	510
45°	665	658	642	630	626	513
55°	503	497	484	472	466	450
65°	340	333	322	313	308	336
75°	178	176	170	164	166	190
85°	43	42	41	38	37	51
90°	0	0	0	0	0	

TEST NUMBER: P931245

CATALOG NUMBER: DFN2DS-TR2F0-030DS830-FLL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1099.6	1099.6	1099.6	1099.6	1099.6
2.5°	1106.0	1100.7	1089.0	1099.6	1097.6
5°	1099.6	1095.5	1083.8	1092.2	1090.2
7.5°	1092.2	1085.9	1074.3	1082.8	1080.7
10°	1080.7	1073.2	1060.6	1069.0	1065.9
12.5°	1064.7	1058.4	1045.8	1051.0	1048.9
15°	1046.8	1040.5	1026.7	1030.9	1025.6
17.5°	1024.5	1018.3	1004.5	1009.7	1004.5
20°	1000.2	993.9	979.1	982.2	978.1
22.5°	976.0	966.5	952.6	952.6	950.5
25°	947.4	939.0	921.0	923.1	921.0
27.5°	915.6	908.2	894.5	891.4	886.1
30°	884.0	875.5	859.7	856.5	852.2
32.5°	850.2	843.8	826.9	820.5	816.2
35°	817.4	806.8	789.9	783.5	778.2
37.5°	780.4	770.8	753.9	746.4	741.2
40°	742.3	733.8	716.9	707.4	703.2
42.5°	705.3	696.8	679.9	669.3	663.0
45°	665.1	657.7	641.8	630.2	626.0
47.5°	626.0	618.6	601.7	590.0	583.7
50°	584.7	579.4	564.6	549.8	544.6
52.5°	544.6	537.1	523.5	511.8	504.3
55°	503.4	497.0	484.3	471.7	466.4
57.5°	462.1	456.8	443.0	430.3	426.1
60°	420.8	416.6	401.9	390.2	387.1
62.5°	380.7	373.2	362.7	352.1	347.9
65°	339.5	333.1	322.5	313.0	307.8
67.5°	297.2	291.8	282.3	275.0	270.7
70°	258.0	253.8	244.3	236.8	232.7
72.5°	217.9	213.6	208.3	200.9	197.8
75°	177.6	175.6	170.2	163.9	166.1
77.5°	141.7	137.4	135.3	132.2	129.1
80°	105.8	104.7	102.5	99.4	97.3
82.5°	71.9	71.9	70.9	66.6	66.6
85°	43.3	42.3	41.3	38.1	37.0
87.5°	19.0	17.0	14.8	11.7	10.6
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P931245

CATALOG NUMBER: DFN2DS-TR2F0-030DS830-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	14.40	16.01	14.76	16.32	16.64	13.95	15.57	14.32	15.88	16.19
	3H	16.15	17.60	16.53	17.93	18.29	15.66	17.11	16.04	17.44	17.80
	4H	16.80	18.17	17.19	18.51	18.89	16.30	17.67	16.70	18.02	18.39
	6H	17.27	18.53	17.68	18.90	19.29	16.76	18.03	17.18	18.40	18.79
	8H	17.41	18.62	17.83	19.01	19.41	16.91	18.12	17.33	18.51	18.90
	12H	17.50	18.66	17.93	19.04	19.47	16.99	18.15	17.42	18.53	18.96
4H	2H	14.96	16.33	15.36	16.68	17.05	14.61	15.98	15.01	16.32	16.70
	3H	16.94	18.08	17.34	18.48	18.88	16.53	17.67	16.94	18.07	18.47
	4H	17.71	18.75	18.14	19.16	19.60	17.29	18.32	17.72	18.74	19.17
	6H	18.31	19.21	18.76	19.65	20.11	17.88	18.78	18.33	19.22	19.68
	8H	18.50	19.34	18.96	19.79	20.25	18.06	18.91	18.52	19.35	19.81
	12H	18.63	19.39	19.11	19.87	20.33	18.18	18.94	18.66	19.41	19.88
8H	4H	17.99	18.83	18.45	19.27	19.74	17.61	18.46	18.07	18.90	19.37
	6H	18.70	19.40	19.19	19.89	20.37	18.32	19.02	18.81	19.51	19.99
	8H	18.96	19.59	19.47	20.10	20.58	18.57	19.20	19.08	19.70	20.19
	12H	19.16	19.72	19.67	20.21	20.77	18.75	19.30	19.25	19.79	20.36
12H	4H	18.01	18.77	18.49	19.25	19.72	17.65	18.41	18.13	18.88	19.35
	6H	18.74	19.38	19.25	19.88	20.37	18.38	19.01	18.89	19.52	20.00
	8H	19.06	19.62	19.57	20.11	20.67	18.68	19.24	19.19	19.73	20.29