

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: P931329

Luminaire Tested: DFN2DS-TR3F0-030DS935-FLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P931329
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-TR3F0-030DS935-FLL
Description: 3 foot, Triangle Define Geo, with Direct Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

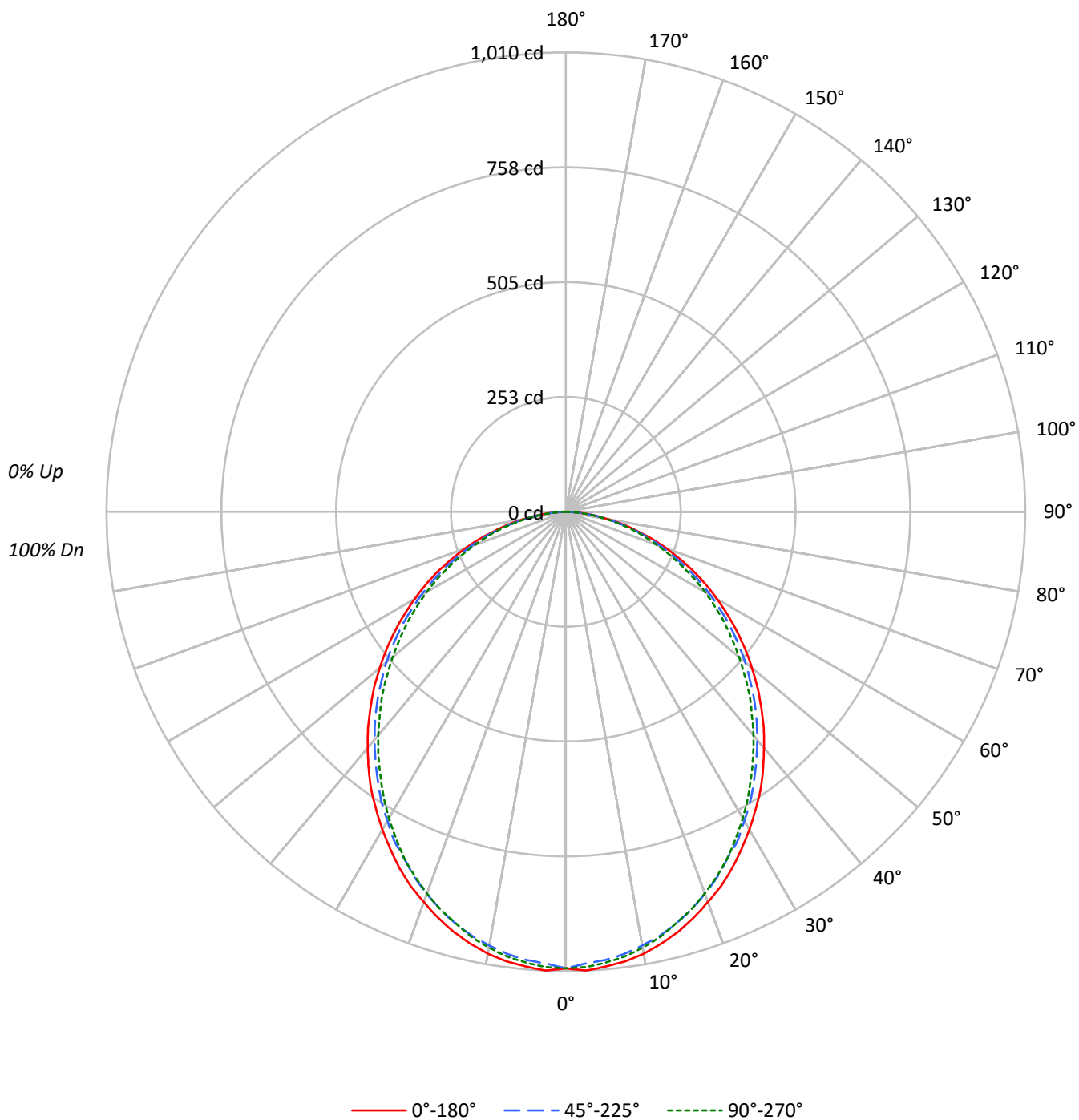
Lumens per Lamp: N/A
Luminaire Lumens: 2554.2 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 3.16' x L: 2.74' x H: 0')
CIE Type: Direct

Input Watts (W): 28.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9968
Total Harmonic Distortion (THDi): 0.064
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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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°	1251	1251	1251
5°	1256	1238	1245
10°	1248	1225	1231
15°	1233	1209	1208
20°	1211	1185	1184
25°	1189	1156	1156
30°	1161	1129	1119
35°	1135	1097	1081
40°	1102	1065	1044
45°	1070	1033	1007
50°	1035	999	964
55°	998	960	925
60°	958	914	881
65°	914	868	829
70°	858	812	774
75°	780	748	730
80°	693	672	637
85°	566	539	483

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1070 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	3.7
10°-20°	265.8	10.4
20°-30°	390.7	15.3
30°-40°	453.8	17.8
40°-50°	453.2	17.7
50°-60°	395.2	15.5
60°-70°	292.1	11.4
70°-80°	165.3	6.5
80°-90°	43.6	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°	751.0	29.4
0°-40°	1204.8	47.2
0°-60°	2053.2	80.4
0°-90°	2554.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2554.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	1004	1000	989	997	995	95
15°	956	950	937	941	936	269
25°	865	857	841	843	841	398
35°	746	737	721	715	710	466
45°	607	600	586	575	572	469
55°	460	454	442	431	426	411
65°	310	304	294	286	281	306
75°	162	160	155	150	152	173
85°	40	39	38	35	34	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1003.9	1003.9	1003.9	1003.9	1003.9
2.5°	1009.7	1004.9	994.2	1003.9	1002.1
5°	1003.9	1000.1	989.4	997.2	995.3
7.5°	997.2	991.4	980.7	988.6	986.6
10°	986.6	979.8	968.3	975.9	973.1
12.5°	972.1	966.3	954.8	959.5	957.6
15°	955.6	950.0	937.3	941.2	936.4
17.5°	935.3	929.7	917.0	921.8	917.0
20°	913.1	907.4	893.9	896.7	892.9
22.5°	891.0	882.4	869.7	869.7	867.7
25°	864.9	857.2	840.8	842.7	840.8
27.5°	835.9	829.1	816.7	813.8	809.0
30°	807.0	799.3	784.8	781.9	778.0
32.5°	776.2	770.4	754.9	749.1	745.2
35°	746.2	736.6	721.1	715.3	710.4
37.5°	712.4	703.7	688.3	681.5	676.6
40°	677.7	669.9	654.5	645.9	642.0
42.5°	643.9	636.1	620.7	611.0	605.3
45°	607.2	600.5	585.9	575.3	571.5
47.5°	571.5	564.8	549.3	538.6	532.9
50°	533.8	529.0	515.5	502.0	497.2
52.5°	497.2	490.4	477.9	467.2	460.4
55°	459.6	453.7	442.1	430.6	425.8
57.5°	421.8	417.0	404.5	392.8	389.0
60°	384.2	380.4	366.9	356.2	353.4
62.5°	347.5	340.7	331.1	321.5	317.6
65°	309.9	304.1	294.5	285.8	281.0
67.5°	271.3	266.4	257.7	251.0	247.2
70°	235.6	231.7	223.0	216.2	212.4
72.5°	198.9	195.0	190.1	183.4	180.6
75°	162.1	160.3	155.4	149.6	151.6
77.5°	129.3	125.5	123.5	120.7	117.8
80°	96.6	95.5	93.6	90.7	88.8
82.5°	65.6	65.6	64.8	60.8	60.8
85°	39.6	38.6	37.7	34.7	33.8
87.5°	17.4	15.5	13.5	10.7	9.6
90°	0.0	0.0	0.0	0.0	0.0

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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	12.06	13.67	12.42	13.98	14.30	11.62	13.23	11.98	13.54	13.85
	3H	13.81	15.26	14.19	15.59	15.95	13.32	14.77	13.70	15.10	15.46
	4H	14.46	15.83	14.86	16.17	16.55	13.96	15.33	14.36	15.68	16.05
	6H	14.93	16.19	15.34	16.56	16.95	14.42	15.69	14.84	16.06	16.45
	8H	15.07	16.28	15.49	16.67	17.07	14.57	15.78	14.99	16.17	16.56
	12H	15.16	16.32	15.59	16.70	17.13	14.65	15.81	15.08	16.19	16.62
4H	2H	12.62	13.99	13.02	14.34	14.71	12.27	13.64	12.67	13.98	14.36
	3H	14.60	15.74	15.01	16.14	16.54	14.19	15.34	14.60	15.73	16.13
	4H	15.37	16.41	15.80	16.82	17.26	14.95	15.98	15.38	16.40	16.83
	6H	15.97	16.87	16.42	17.31	17.77	15.54	16.44	15.99	16.88	17.34
	8H	16.16	17.00	16.62	17.45	17.91	15.72	16.57	16.18	17.01	17.47
	12H	16.29	17.05	16.77	17.53	18.00	15.84	16.60	16.32	17.07	17.54
8H	4H	15.65	16.49	16.11	16.93	17.40	15.27	16.12	15.73	16.56	17.03
	6H	16.36	17.06	16.85	17.55	18.03	15.98	16.68	16.47	17.17	17.65
	8H	16.62	17.25	17.13	17.76	18.24	16.23	16.86	16.74	17.36	17.85
	12H	16.82	17.38	17.33	17.87	18.43	16.41	16.96	16.91	17.45	18.02
12H	4H	15.67	16.43	16.15	16.91	17.38	15.31	16.07	15.79	16.54	17.01
	6H	16.41	17.04	16.91	17.54	18.03	16.04	16.67	16.55	17.18	17.66
	8H	16.72	17.28	17.23	17.77	18.33	16.34	16.90	16.85	17.39	17.95