

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: P931320

Luminaire Tested: DFN2DS-TR3F0-030DS835-RLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P931320
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-TR3F0-030DS835-RLL
Description: 3 foot, Triangle Define Geo, with Direct 1in Regressed Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

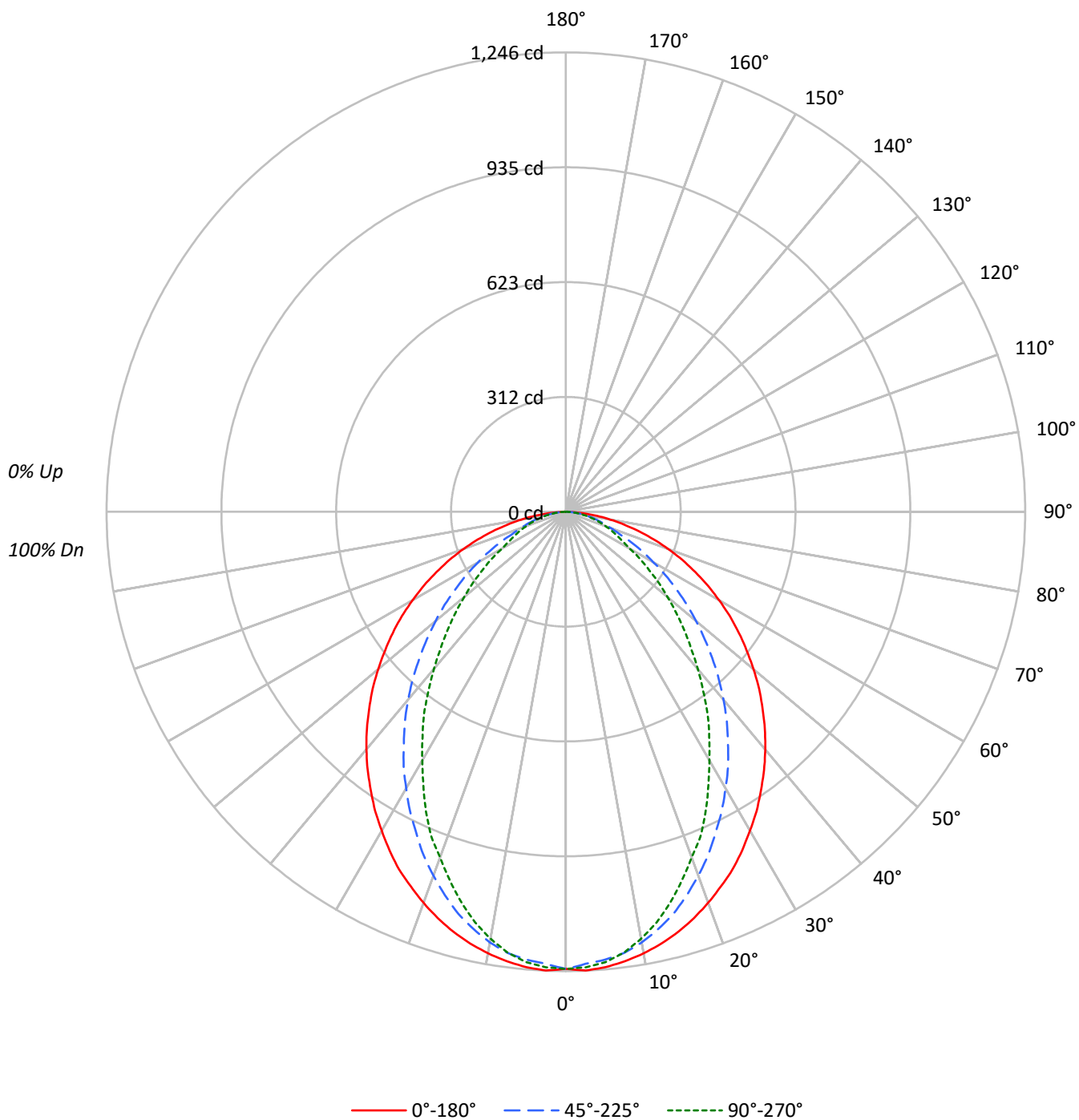
Lumens per Lamp: N/A
Luminaire Lumens: 2550.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 3.16' x L: 2.74' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	1545	1545	1545
5°	1551	1526	1534
10°	1539	1501	1488
15°	1521	1456	1414
20°	1497	1393	1323
25°	1472	1321	1234
30°	1437	1246	1120
35°	1403	1166	1021
40°	1369	1082	905
45°	1329	989	801
50°	1288	894	698
55°	1246	792	600
60°	1197	685	498
65°	1141	576	453
70°	1075	474	417
75°	994	432	389
80°	878	386	354
85°	689	305	305

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1329 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	4.6
10°-20°	319.0	12.5
20°-30°	447.9	17.6
30°-40°	488.2	19.1
40°-50°	448.7	17.6
50°-60°	352.4	13.8
60°-70°	229.4	9.0
70°-80°	118.1	4.6
80°-90°	30.1	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°	883.1	34.6
0°-40°	1371.3	53.8
0°-60°	2172.4	85.2
0°-90°	2550.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2550.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1240	1240	1240	1240	1240	
5°	1240	1234	1220	1230	1226	118
15°	1179	1167	1129	1108	1096	332
25°	1070	1034	960	914	898	492
35°	922	865	766	696	671	577
45°	754	679	561	481	454	582
55°	573	486	365	297	276	512
65°	387	296	195	157	154	384
75°	206	128	90	82	81	218
85°	48	25	21	21	21	58
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1239.9	1239.9	1239.9	1239.9	1239.9
2.5°	1245.5	1239.9	1227.5	1238.8	1236.6
5°	1239.9	1234.3	1219.7	1229.8	1226.4
7.5°	1229.8	1223.1	1207.4	1211.8	1206.2
10°	1216.3	1208.5	1186.1	1182.6	1176.0
12.5°	1199.5	1189.4	1159.1	1152.4	1140.0
15°	1179.3	1166.9	1128.8	1107.5	1096.3
17.5°	1155.7	1137.8	1090.6	1066.0	1048.0
20°	1128.8	1106.3	1050.2	1022.3	997.5
22.5°	1099.7	1073.8	1008.7	970.6	953.8
25°	1070.5	1034.5	960.5	914.5	897.6
27.5°	1035.7	997.5	915.6	862.9	837.0
30°	998.7	956.0	866.2	809.1	778.7
32.5°	962.7	911.1	819.2	751.8	723.7
35°	922.4	865.1	766.4	695.7	671.0
37.5°	883.1	821.3	717.0	639.5	611.6
40°	841.6	774.3	665.4	585.7	556.6
42.5°	798.9	727.2	613.8	530.7	502.7
45°	754.1	678.8	561.1	481.3	454.4
47.5°	711.4	631.8	510.6	430.8	406.2
50°	664.3	584.6	461.2	383.7	360.2
52.5°	618.2	534.1	414.1	340.0	318.7
55°	573.3	485.8	364.6	297.4	276.1
57.5°	527.4	437.6	321.0	258.1	240.1
60°	480.2	390.5	274.9	217.7	199.8
62.5°	434.3	344.5	235.6	181.8	172.9
65°	387.1	296.2	195.2	157.1	153.7
67.5°	342.3	251.3	157.1	138.0	134.6
70°	295.1	207.6	130.1	118.9	114.4
72.5°	250.2	167.1	108.8	99.9	97.6
75°	206.4	127.9	89.8	81.9	80.8
77.5°	162.7	90.8	70.7	66.2	63.9
80°	122.3	65.1	53.8	49.4	49.4
82.5°	85.2	43.8	37.0	34.8	34.8
85°	48.2	24.6	21.3	21.3	21.3
87.5°	18.0	8.9	8.9	7.9	7.9
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	12.75	14.27	13.11	14.58	14.90	8.71	10.23	9.07	10.54	10.86
	3H	14.51	15.88	14.89	16.20	16.57	9.97	11.34	10.35	11.66	12.03
	4H	15.18	16.46	15.58	16.81	17.19	10.47	11.75	10.87	12.10	12.48
	6H	15.67	16.85	16.08	17.22	17.61	10.85	12.04	11.27	12.40	12.80
	8H	15.83	16.96	16.26	17.35	17.75	10.98	12.11	11.41	12.50	12.90
	12H	15.93	17.01	16.37	17.40	17.82	11.06	12.14	11.49	12.52	12.95
4H	2H	12.85	14.13	13.25	14.48	14.86	9.40	10.68	9.80	11.03	11.41
	3H	14.78	15.85	15.19	16.25	16.65	10.84	11.91	11.26	12.31	12.71
	4H	15.53	16.49	15.97	16.90	17.34	11.44	12.40	11.88	12.82	13.25
	6H	16.12	16.96	16.58	17.40	17.86	11.93	12.76	12.39	13.21	13.67
	8H	16.34	17.12	16.80	17.56	18.03	12.09	12.87	12.56	13.32	13.78
	12H	16.49	17.19	16.97	17.66	18.14	12.21	12.91	12.69	13.38	13.86
8H	4H	15.56	16.33	16.02	16.78	17.25	11.80	12.58	12.26	13.02	13.49
	6H	16.19	16.84	16.69	17.33	17.81	12.38	13.03	12.88	13.52	14.00
	8H	16.44	17.02	16.96	17.53	18.02	12.61	13.18	13.12	13.69	14.18
	12H	16.65	17.16	17.16	17.65	18.21	12.79	13.30	13.30	13.79	14.35
12H	4H	15.54	16.24	16.02	16.71	17.19	11.84	12.54	12.32	13.01	13.49
	6H	16.18	16.75	16.69	17.26	17.75	12.45	13.03	12.96	13.54	14.02
	8H	16.46	16.97	16.97	17.46	18.03	12.72	13.23	13.23	13.72	14.29