

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: P930443

Luminaire Tested: DFN2DS-PN2F0-030DS927-FLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P930443
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-PN2F0-030DS927-FLL
Description: 2 foot, Pentagon Define Geo, with Direct Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

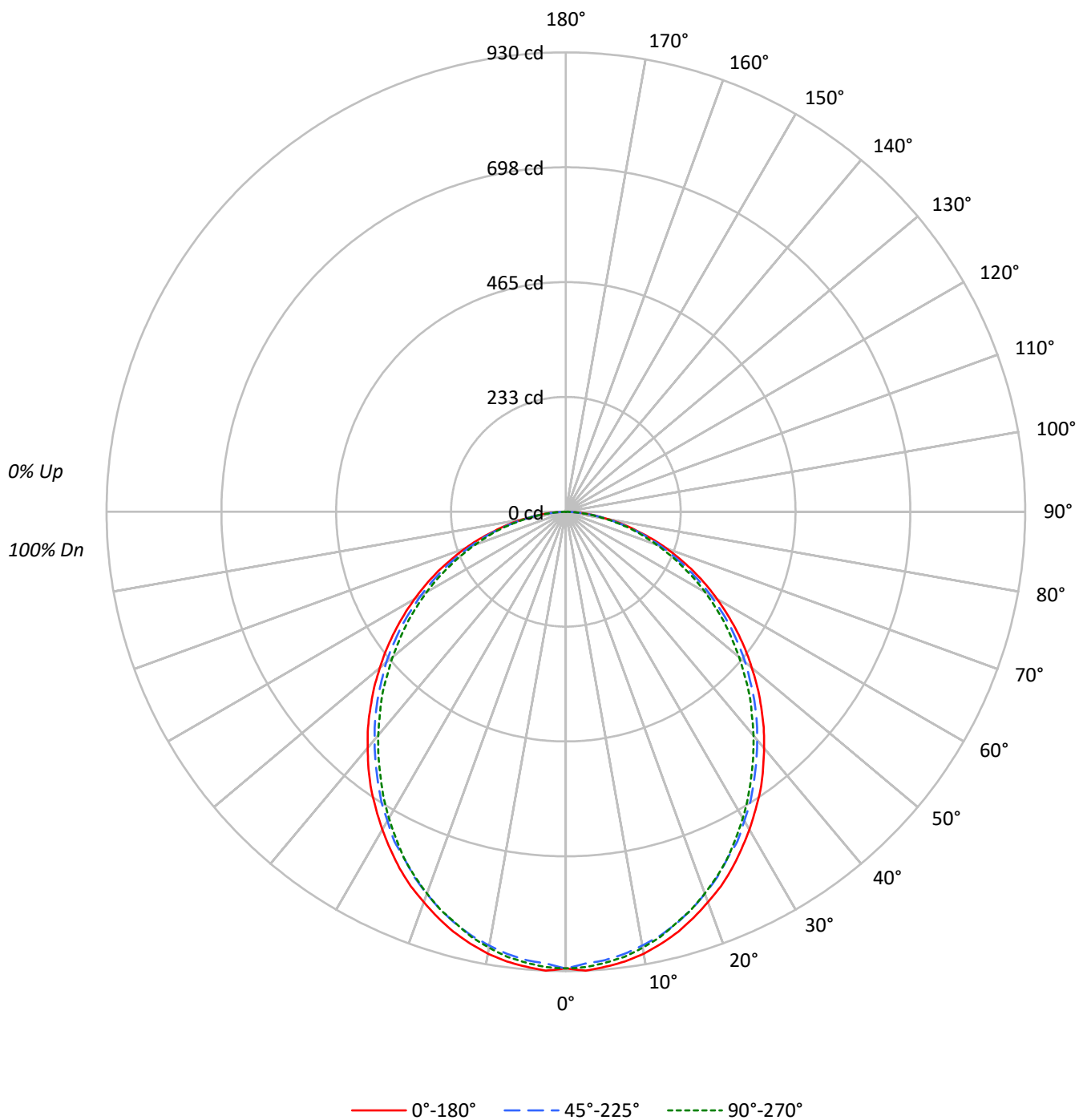
Lumens per Lamp: N/A
Luminaire Lumens: 2352.3 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 2.29' x L: 2.17' x H: 0')
CIE Type: Direct

Input Watts (W): 30.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9972
Total Harmonic Distortion (THDi): 0.128
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°	2002	2002	2002
5°	2010	1981	1993
10°	1998	1961	1971
15°	1973	1936	1934
20°	1938	1897	1895
25°	1903	1850	1850
30°	1859	1808	1792
35°	1817	1756	1730
40°	1765	1704	1672
45°	1713	1653	1612
50°	1656	1600	1543
55°	1598	1538	1481
60°	1533	1464	1410
65°	1463	1390	1326
70°	1374	1301	1239
75°	1249	1198	1168
80°	1109	1075	1020
85°	905	862	773

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 1713 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	3.7
10°-20°	244.8	10.4
20°-30°	359.8	15.3
30°-40°	417.9	17.8
40°-50°	417.4	17.7
50°-60°	363.9	15.5
60°-70°	269.0	11.4
70°-80°	152.2	6.5
80°-90°	40.2	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°	691.6	29.4
0°-40°	1109.5	47.2
0°-60°	1890.8	80.4
0°-90°	2352.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2352.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	924	921	911	918	917	88
15°	880	875	863	867	862	248
25°	796	790	774	776	774	367
35°	687	678	664	659	654	429
45°	559	553	540	530	526	432
55°	423	418	407	397	392	378
65°	285	280	271	263	259	282
75°	149	148	143	138	140	159
85°	36	36	35	32	31	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.5	924.5	924.5	924.5	924.5
2.5°	929.9	925.5	915.6	924.5	922.8
5°	924.5	921.0	911.2	918.3	916.6
7.5°	918.3	913.0	903.2	910.4	908.6
10°	908.6	902.3	891.7	898.8	896.1
12.5°	895.2	889.9	879.3	883.6	881.9
15°	880.1	874.8	863.2	866.8	862.3
17.5°	861.4	856.2	844.5	848.9	844.5
20°	840.9	835.6	823.2	825.8	822.3
22.5°	820.6	812.6	800.9	800.9	799.1
25°	796.5	789.5	774.3	776.1	774.3
27.5°	769.8	763.6	752.1	749.5	745.0
30°	743.2	736.1	722.8	720.1	716.5
32.5°	714.8	709.5	695.2	689.8	686.3
35°	687.2	678.3	664.1	658.7	654.3
37.5°	656.1	648.1	633.8	627.6	623.1
40°	624.1	617.0	602.7	594.8	591.2
42.5°	593.0	585.8	571.7	562.7	557.4
45°	559.2	553.0	539.6	529.8	526.3
47.5°	526.3	520.1	505.9	496.0	490.7
50°	491.6	487.2	474.7	462.3	457.9
52.5°	457.9	451.6	440.1	430.3	424.0
55°	423.2	417.9	407.2	396.6	392.1
57.5°	388.5	384.0	372.5	361.8	358.2
60°	353.8	350.3	337.9	328.0	325.4
62.5°	320.0	313.8	304.9	296.0	292.5
65°	285.4	280.1	271.2	263.2	258.7
67.5°	249.9	245.4	237.4	231.2	227.6
70°	216.9	213.4	205.4	199.1	195.6
72.5°	183.2	179.5	175.1	168.9	166.3
75°	149.3	147.6	143.1	137.8	139.6
77.5°	119.1	115.6	113.7	111.1	108.5
80°	88.9	88.0	86.2	83.6	81.8
82.5°	60.4	60.4	59.6	56.0	56.0
85°	36.4	35.6	34.7	32.0	31.1
87.5°	16.0	14.3	12.4	9.8	8.9
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	13.69	15.30	14.06	15.62	15.93	13.25	14.86	13.62	15.18	15.49
	3H	15.44	16.90	15.82	17.23	17.59	14.95	16.41	15.33	16.73	17.10
	4H	16.09	17.46	16.49	17.81	18.18	15.60	16.97	15.99	17.31	17.69
	6H	16.56	17.83	16.97	18.19	18.58	16.06	17.33	16.47	17.69	18.08
	8H	16.70	17.91	17.13	18.30	18.70	16.20	17.41	16.63	17.80	18.20
	12H	16.79	17.95	17.22	18.33	18.76	16.28	17.44	16.71	17.82	18.25
4H	2H	14.25	15.62	14.65	15.97	16.35	13.90	15.27	14.30	15.62	16.00
	3H	16.23	17.38	16.64	17.77	18.17	15.82	16.97	16.23	17.37	17.77
	4H	17.01	18.04	17.44	18.46	18.89	16.58	17.62	17.01	18.03	18.47
	6H	17.60	18.51	18.06	18.95	19.41	17.17	18.08	17.63	18.52	18.97
	8H	17.79	18.64	18.25	19.08	19.55	17.36	18.20	17.82	18.64	19.11
	12H	17.92	18.68	18.40	19.16	19.63	17.47	18.23	17.95	18.71	19.18
8H	4H	17.28	18.13	17.74	18.57	19.03	16.91	17.75	17.37	18.20	18.66
	6H	17.99	18.70	18.49	19.19	19.66	17.61	18.32	18.11	18.80	19.28
	8H	18.25	18.88	18.76	19.39	19.88	17.86	18.49	18.37	19.00	19.49
	12H	18.45	19.01	18.96	19.50	20.06	18.04	18.60	18.55	19.09	19.65
12H	4H	17.31	18.07	17.79	18.54	19.01	16.94	17.70	17.42	18.18	18.65
	6H	18.04	18.67	18.55	19.18	19.66	17.67	18.30	18.18	18.81	19.30
	8H	18.35	18.91	18.86	19.40	19.96	17.98	18.53	18.48	19.02	19.59

END OF REPORT