

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: P931325

Luminaire Tested: DFN2DS-TR3F0-030DS927-FLL

Issue Date: 11/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P931325
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-TR3F0-030DS927-FLL
Description: 3 foot, Triangle Define Geo, with Direct Frosted Lens
Light Source: -
Ballast/Driver: -

Summary

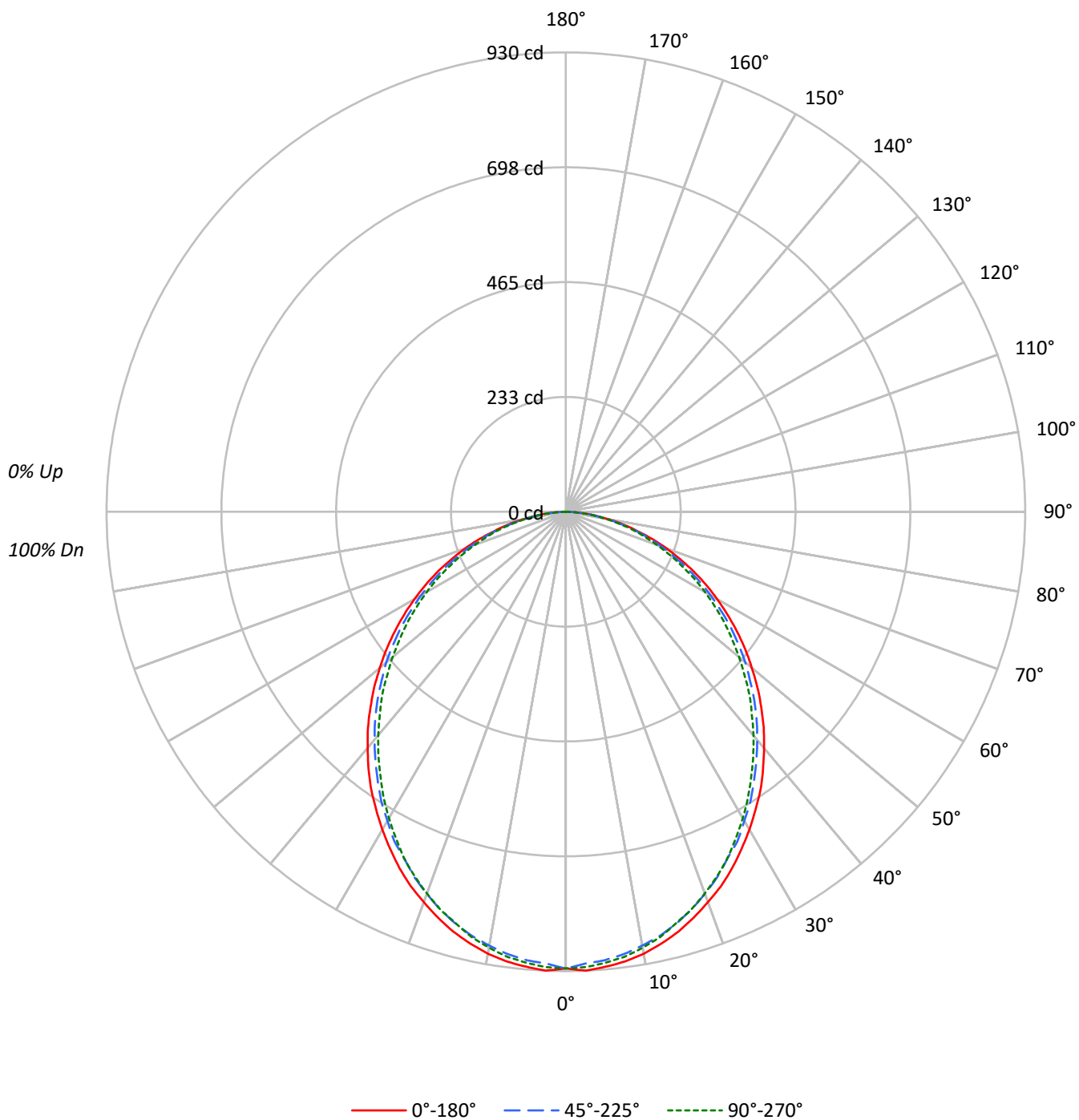
Lumens per Lamp: N/A
Luminaire Lumens: 2352.3 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 3.16' x L: 2.74' x H: 0')
CIE Type: Direct

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°	1152	1152	1152
5°	1156	1140	1147
10°	1150	1128	1134
15°	1135	1114	1112
20°	1115	1092	1090
25°	1095	1065	1065
30°	1069	1040	1031
35°	1045	1010	995
40°	1015	980	962
45°	985	951	927
50°	953	920	888
55°	919	885	852
60°	882	842	811
65°	842	800	763
70°	790	748	713
75°	719	689	672
80°	638	619	587
85°	520	496	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 985 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	11.77	13.38	12.14	13.70	14.01	11.33	12.94	11.69	13.25	13.57
	3H	13.52	14.98	13.90	15.31	15.67	13.03	14.49	13.41	14.81	15.17
	4H	14.17	15.54	14.57	15.89	16.26	13.68	15.04	14.07	15.39	15.77
	6H	14.64	15.91	15.05	16.27	16.66	14.14	15.41	14.55	15.77	16.16
	8H	14.78	15.99	15.21	16.38	16.78	14.28	15.49	14.70	15.88	16.28
	12H	14.87	16.03	15.30	16.41	16.84	14.36	15.52	14.79	15.90	16.33
4H	2H	12.33	13.70	12.73	14.05	14.43	11.98	13.35	12.38	13.70	14.07
	3H	14.31	15.46	14.72	15.85	16.25	13.90	15.05	14.31	15.45	15.85
	4H	15.09	16.12	15.52	16.54	16.97	14.66	15.70	15.09	16.11	16.55
	6H	15.68	16.59	16.14	17.03	17.48	15.25	16.16	15.71	16.60	17.05
	8H	15.87	16.72	16.33	17.16	17.63	15.43	16.28	15.90	16.72	17.19
	12H	16.00	16.76	16.48	17.24	17.71	15.55	16.31	16.03	16.79	17.26
8H	4H	15.36	16.21	15.82	16.65	17.11	14.99	15.83	15.45	16.27	16.74
	6H	16.07	16.78	16.57	17.27	17.74	15.69	16.40	16.19	16.88	17.36
	8H	16.33	16.96	16.84	17.47	17.96	15.94	16.57	16.45	17.08	17.57
	12H	16.53	17.09	17.04	17.58	18.14	16.12	16.68	16.63	17.17	17.73
12H	4H	15.39	16.15	15.87	16.62	17.09	15.02	15.78	15.50	16.26	16.73
	6H	16.12	16.75	16.63	17.26	17.74	15.75	16.38	16.26	16.89	17.38
	8H	16.43	16.99	16.94	17.48	18.04	16.06	16.61	16.56	17.10	17.66