

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242770

Luminaire Tested: S125DRP-S1270D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242770
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S1270D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

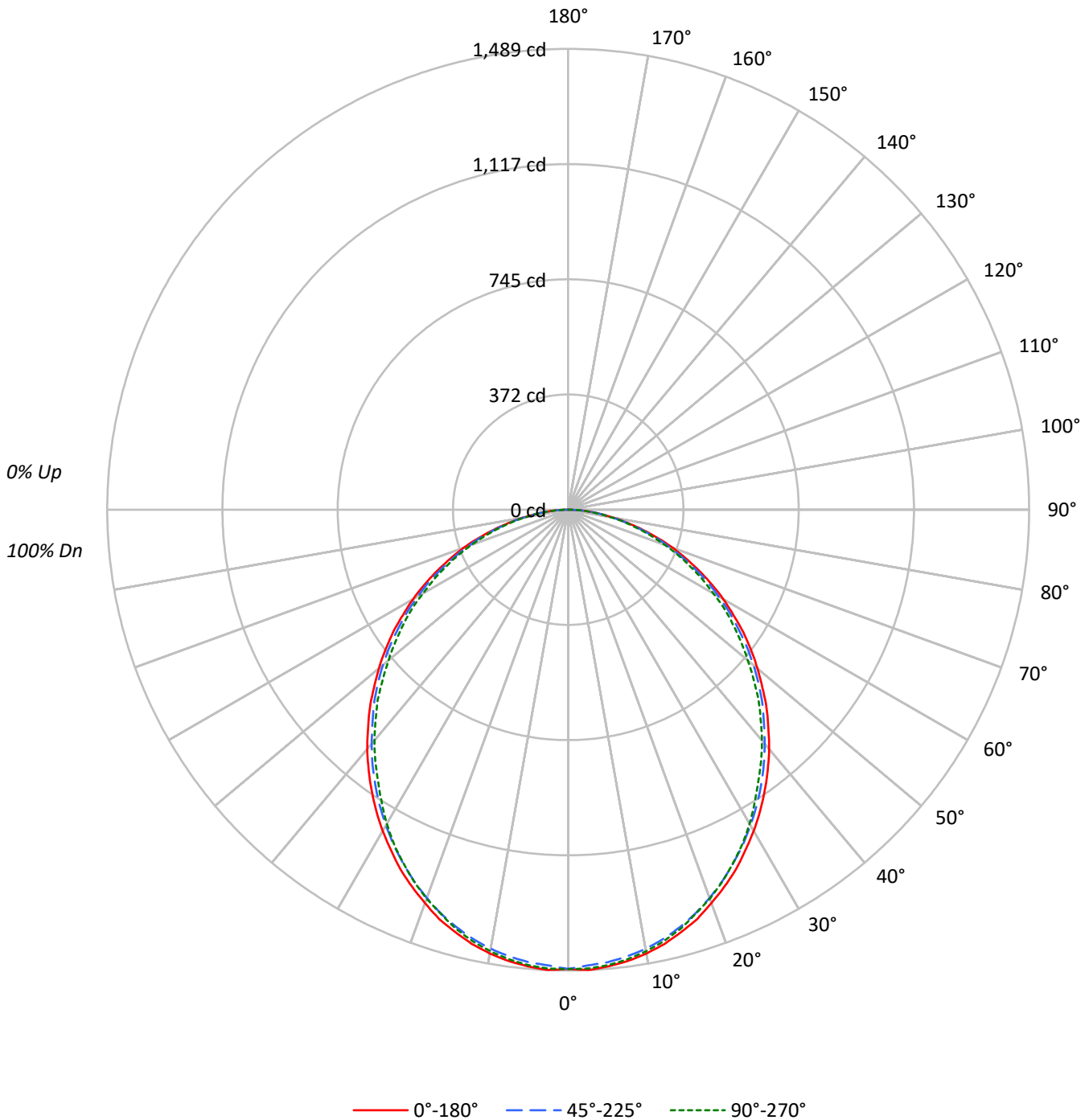
Lumens per Lamp: N/A
Luminaire Lumens: 3862.6 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10547	10547	10547
5°	10571	10471	10538
10°	10507	10397	10456
15°	10393	10272	10315
20°	10230	10096	10115
25°	10054	9889	9879
30°	9838	9664	9616
35°	9607	9423	9291
40°	9368	9161	9030
45°	9111	8922	8745
50°	8828	8633	8374
55°	8555	8307	8074
60°	8227	7977	7693
65°	7839	7581	7326
70°	7466	7124	6880
75°	6802	6577	6352
80°	6053	5959	5816
85°	5268	5358	5072

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9111 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.0	3.6
10°-20°	395.6	10.2
20°-30°	584.0	15.1
30°-40°	681.3	17.6
40°-50°	684.3	17.7
50°-60°	600.7	15.6
60°-70°	447.4	11.6
70°-80°	255.5	6.6
80°-90°	73.8	1.9
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°	1119.6	29.0
0°-40°	1800.9	46.6
0°-60°	3085.9	79.9
0°-90°	3862.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3862.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1484	1484	1484	1484	1484	
5°	1482	1479	1468	1478	1477	141
15°	1412	1409	1396	1402	1402	398
25°	1282	1276	1261	1263	1260	590
35°	1107	1102	1086	1080	1071	693
45°	906	902	888	874	870	698
55°	690	687	670	660	652	616
65°	466	464	451	440	436	462
75°	248	245	240	236	231	264
85°	65	66	66	65	62	75
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1484.0	1484.0	1484.0	1484.0	1484.0
2.5°	1488.7	1485.2	1473.5	1485.2	1484.0
5°	1481.7	1479.3	1467.6	1478.2	1477.0
7.5°	1471.1	1468.8	1455.9	1466.4	1465.2
10°	1455.9	1453.5	1440.6	1450.0	1448.8
12.5°	1437.1	1432.4	1420.6	1427.7	1427.7
15°	1412.4	1408.9	1396.0	1401.8	1401.8
17.5°	1386.6	1380.7	1367.8	1374.8	1369.0
20°	1352.5	1350.2	1334.9	1343.1	1337.3
22.5°	1318.5	1313.8	1299.7	1304.4	1300.9
25°	1282.1	1276.2	1261.0	1263.3	1259.8
27.5°	1239.8	1236.3	1221.0	1222.2	1218.7
30°	1198.7	1195.2	1177.6	1175.2	1171.7
32.5°	1154.1	1148.2	1133.0	1128.3	1121.2
35°	1107.2	1102.5	1086.0	1080.1	1070.8
37.5°	1059.0	1053.1	1037.9	1029.7	1023.8
40°	1009.7	1003.8	987.4	976.8	973.3
42.5°	956.9	952.2	935.7	926.3	920.5
45°	906.4	901.7	887.6	873.5	870.0
47.5°	851.2	852.4	834.8	820.7	812.5
50°	798.4	794.8	780.8	765.5	757.3
52.5°	744.4	742.0	726.8	713.8	704.4
55°	690.4	686.8	670.4	659.8	651.6
57.5°	632.8	631.7	617.6	603.5	600.0
60°	578.8	574.1	561.2	549.5	541.2
62.5°	522.5	518.9	508.4	495.5	489.6
65°	466.1	463.8	450.8	440.3	435.6
67.5°	410.9	406.2	396.8	387.4	385.1
70°	359.3	353.4	342.8	335.8	331.1
72.5°	302.9	299.4	293.5	285.3	280.6
75°	247.7	245.4	239.5	236.0	231.3
77.5°	196.1	194.9	191.4	189.0	185.5
80°	147.9	147.9	145.6	144.4	142.1
82.5°	105.7	103.3	103.3	101.0	101.0
85°	64.6	65.7	65.7	64.6	62.2
87.5°	31.7	31.7	30.5	30.5	28.2
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	19.53	21.15	19.90	21.47	21.78	19.21	20.83	19.57	21.14	21.45
	3H	21.30	22.77	21.68	23.09	23.45	20.94	22.40	21.32	22.73	23.09
	4H	21.96	23.34	22.36	23.69	24.06	21.59	22.96	21.98	23.31	23.69
	6H	22.44	23.71	22.85	24.08	24.47	22.07	23.35	22.48	23.71	24.10
	8H	22.59	23.81	23.02	24.20	24.60	22.23	23.45	22.66	23.84	24.24
	12H	22.70	23.87	23.13	24.25	24.68	22.34	23.51	22.77	23.89	24.32
4H	2H	20.11	21.49	20.51	21.84	22.21	19.85	21.23	20.25	21.58	21.95
	3H	22.11	23.26	22.52	23.66	24.06	21.81	22.96	22.22	23.36	23.76
	4H	22.90	23.94	23.33	24.35	24.79	22.58	23.62	23.01	24.04	24.47
	6H	23.50	24.42	23.96	24.86	25.31	23.20	24.11	23.65	24.55	25.00
	8H	23.71	24.56	24.17	25.00	25.47	23.40	24.26	23.86	24.70	25.17
	12H	23.86	24.63	24.34	25.10	25.57	23.56	24.33	24.04	24.80	25.27
8H	4H	23.18	24.04	23.64	24.48	24.94	22.90	23.76	23.36	24.20	24.67
	6H	23.91	24.62	24.40	25.11	25.58	23.64	24.35	24.14	24.84	25.32
	8H	24.19	24.83	24.70	25.33	25.82	23.93	24.56	24.44	25.07	25.56
	12H	24.42	24.98	24.93	25.47	26.03	24.16	24.72	24.67	25.21	25.77
12H	4H	23.21	23.98	23.69	24.45	24.92	22.94	23.71	23.42	24.18	24.65
	6H	23.96	24.60	24.47	25.11	25.59	23.70	24.34	24.21	24.85	25.34
	8H	24.30	24.86	24.81	25.35	25.91	24.05	24.61	24.55	25.10	25.66