

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: P242794

Luminaire Tested: S125DRP-S1270D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242794
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-S1270D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

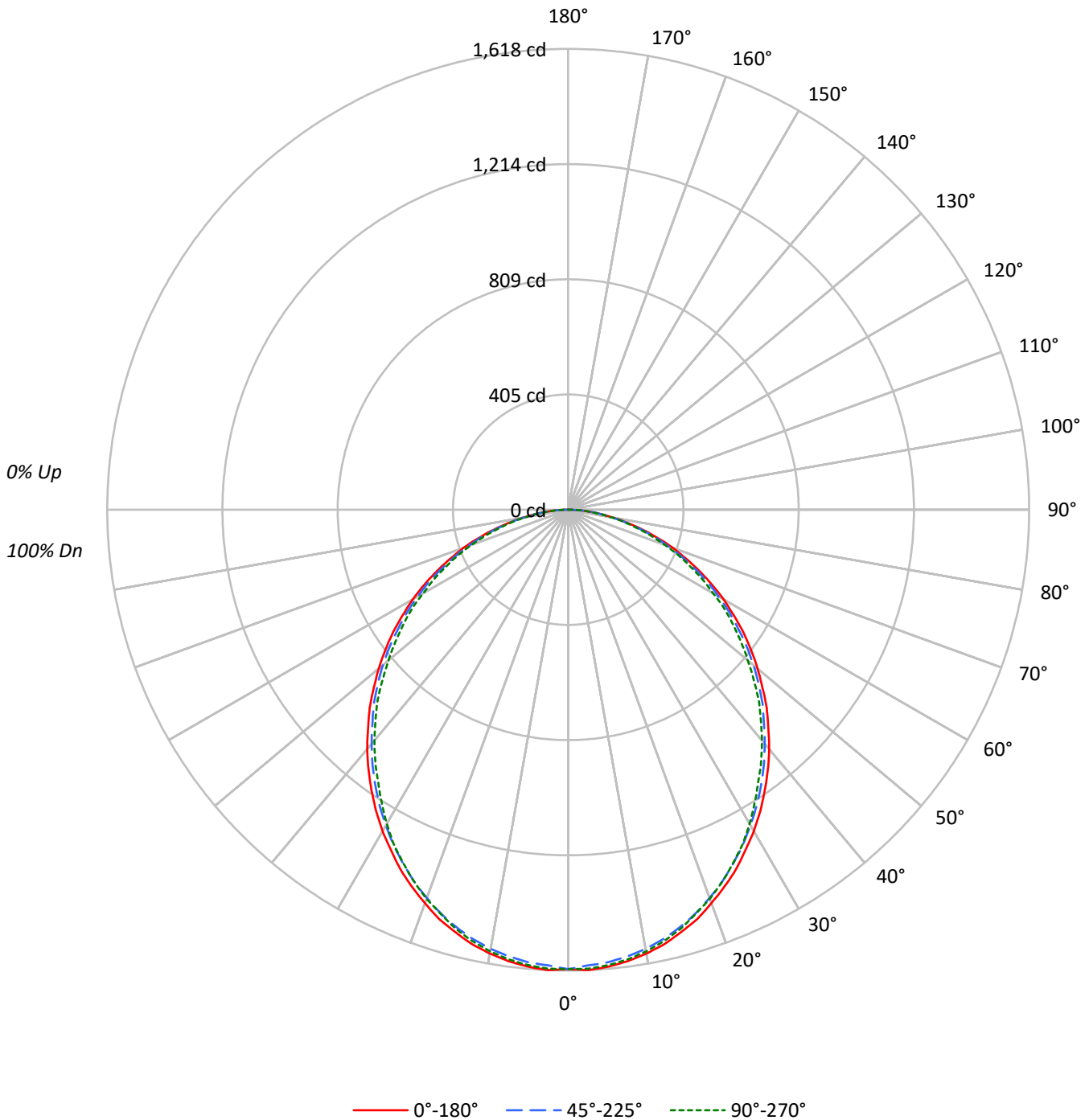
Lumens per Lamp: N/A
Luminaire Lumens: 4198.1 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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°	11464	11464	11464
5°	11489	11380	11453
10°	11419	11300	11365
15°	11295	11164	11211
20°	11118	10974	10993
25°	10928	10748	10737
30°	10693	10504	10451
35°	10440	10242	10098
40°	10182	9957	9815
45°	9902	9696	9505
50°	9594	9383	9101
55°	9297	9028	8776
60°	8942	8671	8363
65°	8520	8241	7961
70°	8115	7743	7479
75°	7395	7148	6904
80°	6581	6475	6320
85°	5725	5831	5513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9902 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.2	3.6
10°-20°	429.9	10.2
20°-30°	634.7	15.1
30°-40°	740.5	17.6
40°-50°	743.7	17.7
50°-60°	652.9	15.6
60°-70°	486.3	11.6
70°-80°	277.7	6.6
80°-90°	80.2	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°	1216.8	29.0
0°-40°	1957.3	46.6
0°-60°	3353.9	79.9
0°-90°	4198.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4198.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1613	1613	1613	1613	1613	
5°	1610	1608	1595	1607	1605	153
15°	1535	1531	1517	1524	1524	433
25°	1394	1387	1370	1373	1369	641
35°	1203	1198	1180	1174	1164	753
45°	985	980	965	949	946	759
55°	750	746	729	717	708	670
65°	507	504	490	478	473	502
75°	269	267	260	256	251	287
85°	70	72	72	70	68	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1613.0	1613.0	1613.0	1613.0	1613.0
2.5°	1618.1	1614.2	1601.5	1614.2	1613.0
5°	1610.4	1607.8	1595.1	1606.6	1605.3
7.5°	1598.9	1596.4	1582.3	1593.8	1592.5
10°	1582.3	1579.8	1565.7	1575.9	1574.7
12.5°	1561.9	1556.8	1544.0	1551.7	1551.7
15°	1535.1	1531.3	1517.2	1523.6	1523.6
17.5°	1507.0	1500.7	1486.6	1494.3	1487.9
20°	1470.0	1467.5	1450.9	1459.8	1453.4
22.5°	1433.0	1427.9	1412.6	1417.7	1413.9
25°	1393.5	1387.1	1370.5	1373.0	1369.2
27.5°	1347.5	1343.7	1327.1	1328.4	1324.6
30°	1302.9	1299.0	1279.9	1277.3	1273.5
32.5°	1254.4	1248.0	1231.4	1226.3	1218.6
35°	1203.3	1198.2	1180.4	1174.0	1163.8
37.5°	1151.0	1144.6	1128.0	1119.1	1112.7
40°	1097.4	1091.0	1073.2	1061.7	1057.9
42.5°	1040.0	1034.9	1017.0	1006.8	1000.4
45°	985.1	980.0	964.7	949.4	945.6
47.5°	925.1	926.4	907.3	892.0	883.0
50°	867.7	863.9	848.6	832.0	823.1
52.5°	809.0	806.5	789.9	775.8	765.6
55°	750.3	746.5	728.6	717.2	708.2
57.5°	687.8	686.5	671.2	655.9	652.1
60°	629.1	624.0	610.0	597.2	588.3
62.5°	567.9	564.0	552.5	538.5	532.1
65°	506.6	504.0	490.0	478.5	473.4
67.5°	446.6	441.5	431.3	421.1	418.6
70°	390.5	384.1	372.6	365.0	359.9
72.5°	329.2	325.4	319.0	310.1	305.0
75°	269.3	266.7	260.3	256.5	251.4
77.5°	213.1	211.8	208.0	205.4	201.6
80°	160.8	160.8	158.2	157.0	154.4
82.5°	114.8	112.3	112.3	109.7	109.7
85°	70.2	71.5	71.5	70.2	67.6
87.5°	34.5	34.5	33.2	33.2	30.6
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	19.82	21.44	20.19	21.76	22.07	19.50	21.12	19.86	21.43	21.74
	3H	21.59	23.06	21.97	23.38	23.74	21.23	22.69	21.61	23.02	23.38
	4H	22.25	23.63	22.65	23.98	24.35	21.87	23.25	22.27	23.60	23.98
	6H	22.73	24.00	23.14	24.37	24.76	22.36	23.64	22.77	24.00	24.39
	8H	22.88	24.10	23.31	24.49	24.89	22.52	23.74	22.95	24.13	24.53
	12H	22.99	24.16	23.42	24.54	24.97	22.63	23.80	23.06	24.18	24.61
4H	2H	20.40	21.78	20.80	22.13	22.50	20.14	21.52	20.54	21.87	22.24
	3H	22.40	23.55	22.81	23.95	24.35	22.10	23.25	22.50	23.65	24.05
	4H	23.18	24.23	23.62	24.64	25.08	22.87	23.91	23.30	24.33	24.76
	6H	23.79	24.70	24.25	25.15	25.60	23.48	24.40	23.94	24.84	25.29
	8H	24.00	24.85	24.46	25.29	25.76	23.69	24.55	24.15	24.99	25.45
	12H	24.15	24.92	24.63	25.39	25.86	23.85	24.62	24.33	25.09	25.56
8H	4H	23.47	24.32	23.93	24.77	25.23	23.19	24.05	23.65	24.49	24.95
	6H	24.20	24.91	24.69	25.40	25.87	23.93	24.64	24.43	25.13	25.61
	8H	24.48	25.12	24.99	25.62	26.11	24.22	24.85	24.72	25.36	25.85
	12H	24.71	25.27	25.22	25.76	26.32	24.45	25.01	24.96	25.50	26.06
12H	4H	23.50	24.27	23.98	24.74	25.21	23.23	24.00	23.71	24.47	24.94
	6H	24.25	24.89	24.76	25.40	25.88	23.99	24.63	24.50	25.14	25.62
	8H	24.59	25.15	25.10	25.64	26.20	24.34	24.90	24.84	25.39	25.95