

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: P243653

Luminaire Tested: S125DRP-H1090D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243653
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H1090D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

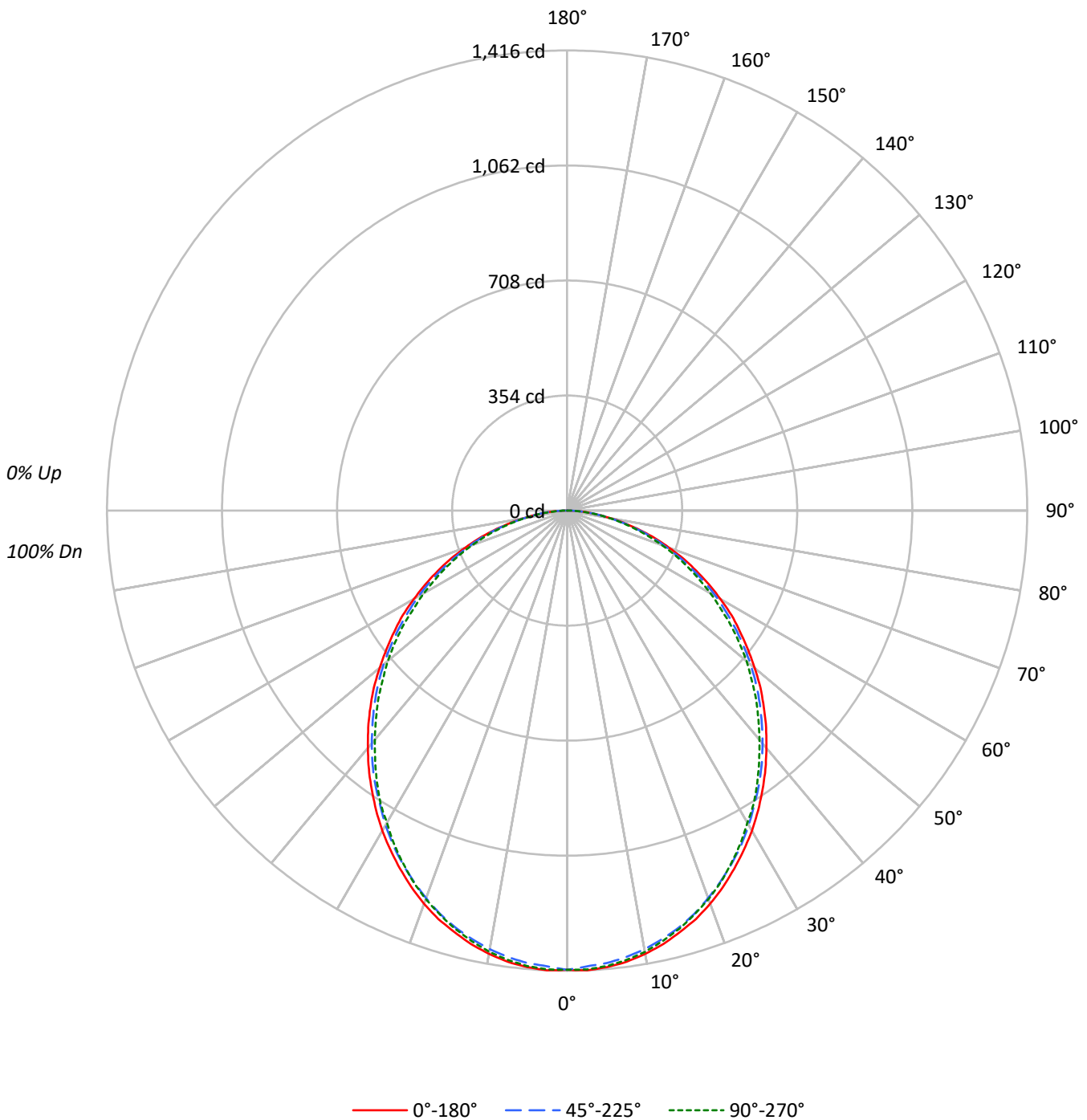
Lumens per Lamp: N/A
Luminaire Lumens: 3647.5 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
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	95	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	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10043	10043	10043
5°	10060	9970	10037
10°	9996	9892	9952
15°	9879	9772	9802
20°	9739	9598	9621
25°	9537	9399	9382
30°	9334	9172	9104
35°	9094	8932	8851
40°	8849	8676	8541
45°	8607	8420	8263
50°	8323	8150	7967
55°	8042	7824	7618
60°	7737	7515	7251
65°	7374	7114	6870
70°	6916	6656	6442
75°	6376	6179	5893
80°	5558	5517	5390
85°	4819	4819	4567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8607 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	3.7
10°-20°	376.2	10.3
20°-30°	554.6	15.2
30°-40°	645.8	17.7
40°-50°	647.1	17.7
50°-60°	565.8	15.5
60°-70°	419.9	11.5
70°-80°	238.1	6.5
80°-90°	66.8	1.8
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°	1064.1	29.2
0°-40°	1709.9	46.9
0°-60°	2922.8	80.1
0°-90°	3647.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3647.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1413	1413	1413	1413	1413	
5°	1410	1408	1398	1408	1407	134
15°	1343	1340	1328	1335	1332	379
25°	1216	1212	1198	1202	1196	560
35°	1048	1042	1030	1023	1020	656
45°	856	854	838	825	822	660
55°	649	648	631	618	615	581
65°	438	435	423	414	408	435
75°	232	228	225	221	215	246
85°	59	59	59	57	56	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1413.1	1413.1	1413.1	1413.1	1413.1
2.5°	1416.2	1414.1	1403.7	1414.1	1413.1
5°	1410.0	1407.9	1397.5	1407.9	1406.8
7.5°	1400.6	1397.5	1386.1	1396.5	1394.4
10°	1385.1	1383.0	1370.6	1378.9	1378.9
12.5°	1366.4	1363.3	1350.9	1358.1	1357.1
15°	1342.6	1340.5	1328.1	1335.3	1332.2
17.5°	1317.7	1312.5	1301.1	1307.3	1303.2
20°	1287.6	1283.5	1269.0	1274.1	1272.1
22.5°	1253.4	1248.2	1234.7	1237.9	1236.8
25°	1216.1	1211.9	1198.5	1201.6	1196.4
27.5°	1177.7	1172.5	1160.1	1160.1	1154.9
30°	1137.3	1132.1	1117.6	1117.6	1109.3
32.5°	1093.8	1089.6	1072.0	1070.9	1068.9
35°	1048.1	1041.9	1029.5	1023.3	1020.1
37.5°	1002.5	997.3	983.9	975.6	970.4
40°	953.8	950.7	935.1	927.9	920.6
42.5°	906.1	903.0	886.4	874.0	870.9
45°	856.3	854.3	837.7	825.2	822.1
47.5°	806.6	804.5	787.9	774.4	769.3
50°	752.7	752.7	737.1	723.6	720.5
52.5°	700.8	699.8	684.2	670.8	667.7
55°	649.0	648.0	631.4	617.9	614.8
57.5°	600.3	594.0	579.5	569.2	558.8
60°	544.3	541.2	528.7	515.3	510.1
62.5°	492.4	488.3	475.9	464.5	457.2
65°	438.5	435.4	423.0	413.7	408.5
67.5°	387.7	383.6	371.1	363.9	359.7
70°	332.8	329.7	320.3	311.0	310.0
72.5°	284.1	279.9	274.7	266.4	262.3
75°	232.2	228.1	225.0	220.8	214.6
77.5°	182.5	180.4	178.3	175.2	172.1
80°	135.8	135.8	134.8	132.7	131.7
82.5°	96.4	97.5	94.3	92.3	92.3
85°	59.1	59.1	59.1	57.0	56.0
87.5°	29.0	25.9	25.9	23.8	23.8
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	19.32	20.94	19.69	21.25	21.57	18.99	20.60	19.35	20.92	21.23
	3H	21.08	22.54	21.46	22.87	23.23	20.70	22.16	21.08	22.49	22.85
	4H	21.73	23.10	22.13	23.45	23.83	21.34	22.71	21.74	23.06	23.43
	6H	22.19	23.46	22.60	23.83	24.22	21.81	23.08	22.22	23.45	23.84
	8H	22.34	23.56	22.77	23.95	24.34	21.97	23.18	22.39	23.57	23.97
	12H	22.44	23.61	22.87	23.99	24.42	22.07	23.23	22.50	23.61	24.04
4H	2H	19.89	21.27	20.29	21.62	21.99	19.63	21.00	20.03	21.35	21.73
	3H	21.88	23.03	22.29	23.42	23.82	21.56	22.71	21.97	23.11	23.51
	4H	22.65	23.69	23.08	24.11	24.54	22.33	23.37	22.76	23.78	24.22
	6H	23.24	24.15	23.70	24.59	25.05	22.93	23.84	23.38	24.28	24.73
	8H	23.44	24.29	23.90	24.73	25.20	23.13	23.98	23.59	24.42	24.89
	12H	23.59	24.35	24.07	24.83	25.30	23.27	24.04	23.75	24.51	24.98
8H	4H	22.94	23.79	23.40	24.23	24.69	22.65	23.50	23.11	23.94	24.41
	6H	23.64	24.35	24.14	24.84	25.31	23.37	24.08	23.86	24.56	25.04
	8H	23.92	24.55	24.43	25.06	25.54	23.64	24.27	24.15	24.78	25.27
	12H	24.14	24.70	24.64	25.19	25.75	23.86	24.42	24.36	24.91	25.47
12H	4H	22.96	23.73	23.44	24.20	24.67	22.68	23.45	23.16	23.92	24.39
	6H	23.69	24.33	24.20	24.84	25.32	23.43	24.06	23.94	24.57	25.05
	8H	24.02	24.58	24.53	25.07	25.64	23.76	24.32	24.26	24.81	25.37