

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: P242897

Luminaire Tested: S125RDRP-S1270D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242897
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S1270D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

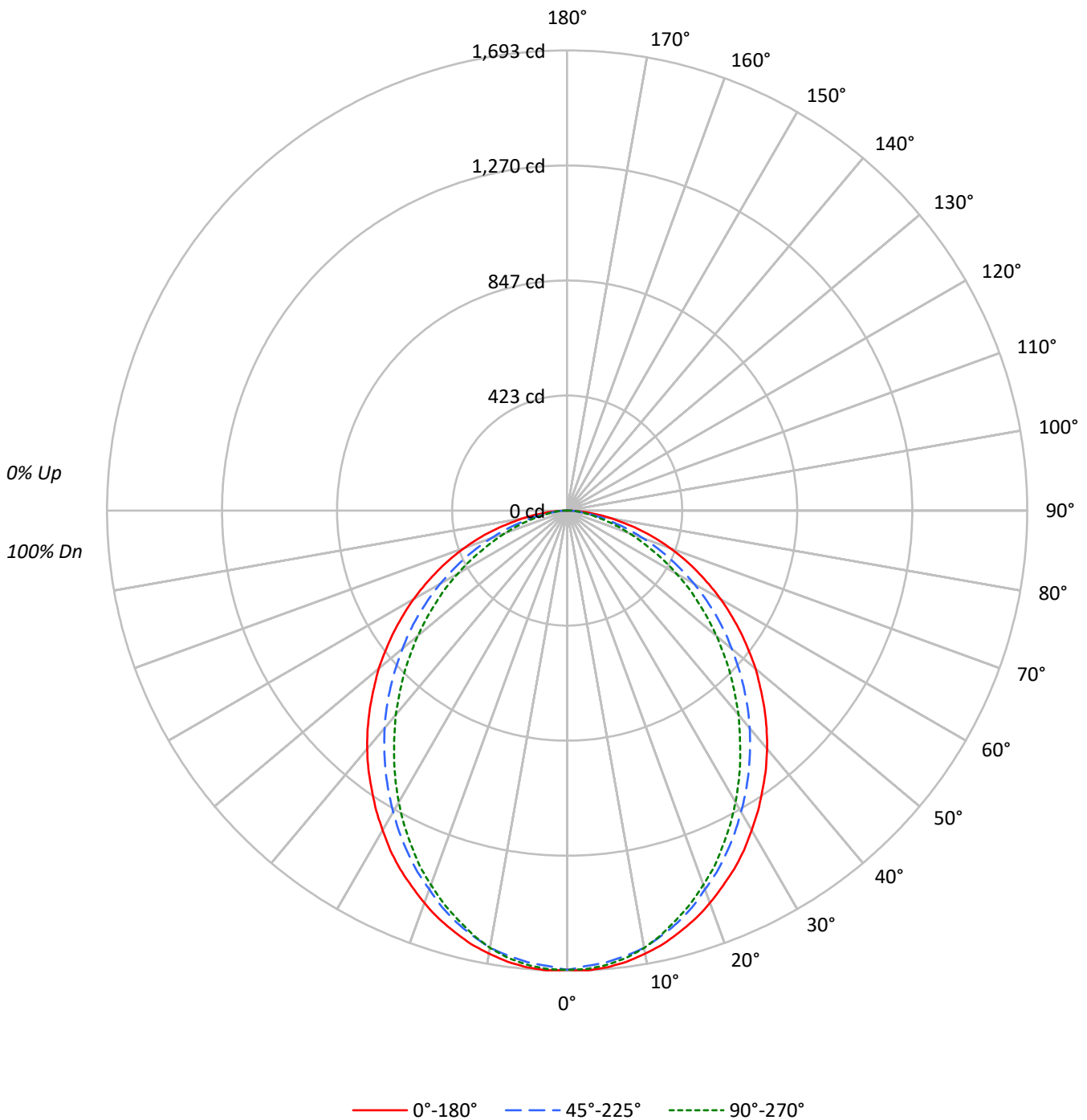
Lumens per Lamp: N/A
Luminaire Lumens: 3991.7 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12008	12008	12008
5°	12036	11899	11972
10°	11945	11788	11788
15°	11802	11549	11455
20°	11621	11215	11080
25°	11408	10888	10647
30°	11142	10504	10169
35°	10872	10109	9633
40°	10620	9696	9104
45°	10313	9235	8530
50°	10003	8734	7930
55°	9645	8254	7290
60°	9286	7673	6603
65°	8863	6996	5815
70°	8379	6151	5012
75°	7708	5187	4171
80°	6790	4072	3499
85°	5725	3327	3123

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10313 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.0	4.0
10°-20°	444.4	11.1
20°-30°	644.3	16.1
30°-40°	734.1	18.4
40°-50°	715.5	17.9
50°-60°	602.2	15.1
60°-70°	422.0	10.6
70°-80°	216.3	5.4
80°-90°	53.9	1.4
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°	1247.7	31.3
0°-40°	1981.8	49.6
0°-60°	3299.5	82.7
0°-90°	3991.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3991.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1690	1690	1690	1690	1690	
5°	1687	1682	1668	1681	1678	160
15°	1604	1596	1570	1568	1557	452
25°	1455	1436	1388	1372	1358	669
35°	1253	1222	1165	1128	1110	785
45°	1026	989	919	868	849	791
55°	778	738	666	609	588	696
65°	527	484	416	365	346	522
75°	281	242	189	161	152	297
85°	70	47	41	40	38	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1689.5	1689.5	1689.5	1689.5	1689.5
2.5°	1693.3	1689.5	1676.8	1689.5	1688.2
5°	1687.0	1681.9	1667.8	1680.6	1678.0
7.5°	1674.2	1669.1	1652.5	1662.7	1660.2
10°	1655.1	1651.2	1633.4	1637.2	1633.4
12.5°	1633.4	1628.3	1602.7	1605.3	1598.9
15°	1604.0	1596.4	1569.6	1568.3	1556.8
17.5°	1573.4	1561.9	1530.0	1523.6	1514.7
20°	1536.4	1523.6	1482.8	1476.4	1464.9
22.5°	1495.6	1482.8	1439.4	1425.4	1416.4
25°	1454.7	1435.6	1388.4	1371.8	1357.7
27.5°	1408.8	1385.8	1336.0	1314.4	1300.3
30°	1357.7	1333.5	1279.9	1250.5	1239.1
32.5°	1308.0	1278.6	1223.7	1190.6	1175.3
35°	1253.1	1222.5	1165.1	1128.0	1110.2
37.5°	1200.8	1163.8	1105.1	1061.7	1043.8
40°	1144.6	1106.4	1045.1	996.6	981.3
42.5°	1085.9	1046.4	982.6	936.6	912.4
45°	1026.0	989.0	918.8	867.7	848.6
47.5°	963.4	925.1	855.0	802.6	781.0
50°	904.7	862.6	789.9	736.3	717.2
52.5°	840.9	797.5	729.9	671.2	652.1
55°	778.4	737.6	666.1	608.7	588.3
57.5°	714.6	671.2	602.3	546.2	528.3
60°	653.3	608.7	539.8	483.6	464.5
62.5°	588.3	546.2	476.0	424.9	405.8
65°	527.0	483.6	416.0	365.0	345.8
67.5°	465.8	422.4	357.3	308.8	293.5
70°	403.2	359.9	296.0	256.5	241.2
72.5°	342.0	299.9	241.2	205.4	196.5
75°	280.7	242.5	188.9	160.8	151.9
77.5°	218.2	187.6	142.9	121.2	113.6
80°	165.9	135.3	99.5	88.0	85.5
82.5°	114.8	88.0	66.4	62.5	61.3
85°	70.2	47.2	40.8	39.6	38.3
87.5°	29.3	20.4	19.1	19.1	17.9
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	19.97	21.55	20.34	21.86	22.18	18.41	19.98	18.77	20.30	20.61
	3H	21.76	23.18	22.14	23.51	23.87	19.72	21.14	20.10	21.47	21.83
	4H	22.42	23.75	22.82	24.10	24.48	20.13	21.46	20.53	21.81	22.19
	6H	22.89	24.12	23.30	24.49	24.88	20.39	21.62	20.80	21.99	22.38
	8H	23.04	24.22	23.47	24.60	25.00	20.47	21.64	20.89	22.03	22.43
	12H	23.14	24.26	23.57	24.64	25.07	20.52	21.65	20.95	22.03	22.46
4H	2H	20.37	21.70	20.77	22.05	22.42	19.10	20.43	19.49	20.78	21.15
	3H	22.35	23.46	22.76	23.86	24.26	20.60	21.71	21.01	22.11	22.51
	4H	23.13	24.14	23.57	24.55	24.99	21.09	22.09	21.52	22.51	22.94
	6H	23.73	24.60	24.18	25.04	25.50	21.43	22.31	21.89	22.75	23.21
	8H	23.92	24.74	24.38	25.18	25.64	21.54	22.36	22.01	22.80	23.27
	12H	24.06	24.79	24.54	25.27	25.74	21.63	22.36	22.11	22.84	23.31
8H	4H	23.26	24.07	23.72	24.52	24.98	21.41	22.22	21.87	22.66	23.13
	6H	23.93	24.61	24.43	25.10	25.58	21.83	22.50	22.32	22.99	23.47
	8H	24.18	24.79	24.69	25.29	25.78	21.99	22.59	22.50	23.10	23.59
	12H	24.38	24.91	24.88	25.40	25.97	22.13	22.66	22.64	23.16	23.72
12H	4H	23.25	23.98	23.73	24.46	24.93	21.44	22.17	21.92	22.65	23.12
	6H	23.93	24.54	24.44	25.04	25.53	21.88	22.49	22.39	22.99	23.48
	8H	24.22	24.75	24.72	25.24	25.80	22.09	22.62	22.60	23.11	23.68