

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: P243752

Luminaire Tested: S125RDRP-H1270D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243752
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1270D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

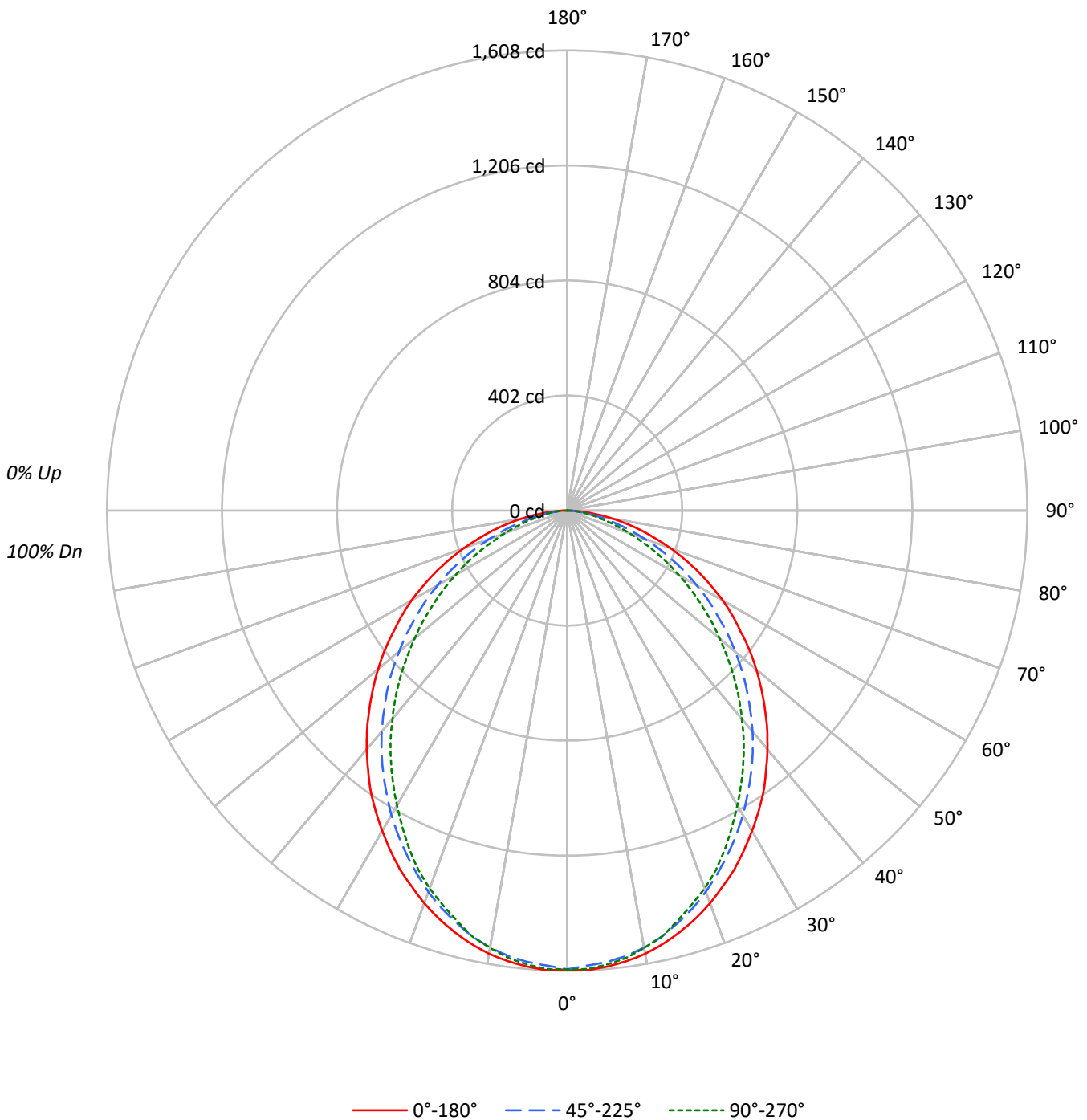
Lumens per Lamp: N/A
Luminaire Lumens: 3832.1 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 37.7
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	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					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	97	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	63	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	43	55	48	43	53	47	43					41				
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38					36				
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34					32				
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31					29				
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28					27				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11394	11394	11394
5°	11414	11299	11365
10°	11347	11190	11198
15°	11214	10978	10927
20°	11042	10721	10625
25°	10846	10406	10235
30°	10607	10080	9760
35°	10388	9721	9313
40°	10108	9352	8810
45°	9821	8934	8288
50°	9536	8471	7697
55°	9194	7958	7077
60°	8917	7433	6407
65°	8486	6808	5671
70°	8007	5958	4838
75°	7370	4976	3938
80°	6479	3847	3238
85°	5521	3180	2993

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9821 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	3.9
10°-20°	423.0	11.0
20°-30°	615.5	16.1
30°-40°	704.9	18.4
40°-50°	689.7	18.0
50°-60°	582.3	15.2
60°-70°	407.7	10.6
70°-80°	207.1	5.4
80°-90°	50.9	1.3
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°	1189.5	31.0
0°-40°	1894.4	49.4
0°-60°	3166.4	82.6
0°-90°	3832.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3832.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1603	1603	1603	1603	1603	
5°	1600	1596	1584	1594	1593	152
15°	1524	1518	1492	1491	1485	430
25°	1383	1367	1327	1313	1305	636
35°	1197	1169	1120	1087	1073	748
45°	977	945	889	842	825	754
55°	742	710	642	591	571	666
65°	505	466	405	354	337	500
75°	268	235	181	151	143	284
85°	68	44	39	37	37	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1603.2	1603.2	1603.2	1603.2	1603.2
2.5°	1607.8	1604.4	1591.8	1603.2	1603.2
5°	1599.8	1596.4	1583.7	1594.1	1592.9
7.5°	1588.3	1584.9	1570.0	1580.3	1576.9
10°	1572.3	1567.7	1550.5	1556.2	1551.6
12.5°	1550.5	1545.9	1525.3	1527.6	1525.3
15°	1524.1	1518.4	1492.0	1490.9	1485.1
17.5°	1494.3	1486.3	1457.6	1454.2	1445.0
20°	1459.9	1449.6	1417.5	1410.6	1404.8
22.5°	1420.9	1410.6	1372.7	1362.4	1359.0
25°	1383.1	1367.0	1326.9	1313.1	1305.1
27.5°	1338.3	1320.0	1278.7	1260.3	1246.6
30°	1292.5	1271.8	1228.2	1204.2	1189.2
32.5°	1245.4	1221.4	1174.3	1144.5	1131.9
35°	1197.3	1168.6	1120.4	1087.2	1073.4
37.5°	1142.2	1113.6	1065.4	1026.4	1013.8
40°	1089.5	1059.7	1008.0	965.6	949.6
42.5°	1034.4	1003.5	947.3	902.5	888.8
45°	977.1	945.0	888.8	841.8	824.6
47.5°	919.7	887.6	829.1	782.1	760.3
50°	862.4	828.0	766.1	717.9	696.1
52.5°	805.1	767.2	706.4	654.8	635.3
55°	742.0	709.9	642.2	590.6	571.1
57.5°	685.8	650.2	586.0	533.3	511.5
60°	627.3	588.3	522.9	471.3	450.7
62.5°	565.4	526.4	463.3	411.7	393.4
65°	504.6	465.6	404.8	354.4	337.2
67.5°	443.8	407.1	346.3	299.3	279.8
70°	385.3	347.5	286.7	244.3	232.8
72.5°	323.4	293.6	232.8	195.0	185.8
75°	268.4	235.1	181.2	151.4	143.4
77.5°	212.2	180.0	134.2	113.5	106.7
80°	158.3	130.7	94.0	81.4	79.1
82.5°	108.9	82.6	61.9	59.6	58.5
85°	67.7	43.6	39.0	36.7	36.7
87.5°	28.7	18.3	18.3	17.2	18.3
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	19.88	21.46	20.24	21.77	22.09	18.37	19.95	18.73	20.26	20.58
	3H	21.64	23.06	22.02	23.39	23.75	19.65	21.07	20.03	21.40	21.76
	4H	22.30	23.63	22.70	23.98	24.36	20.04	21.37	20.44	21.72	22.10
	6H	22.77	24.00	23.18	24.37	24.76	20.27	21.51	20.68	21.87	22.26
	8H	22.91	24.09	23.34	24.48	24.88	20.35	21.53	20.77	21.92	22.32
	12H	23.01	24.14	23.44	24.52	24.95	20.40	21.53	20.83	21.91	22.34
4H	2H	20.28	21.61	20.68	21.96	22.34	19.05	20.39	19.45	20.74	21.11
	3H	22.24	23.35	22.65	23.75	24.15	20.52	21.63	20.93	22.03	22.43
	4H	23.02	24.03	23.45	24.44	24.88	20.98	21.99	21.42	22.40	22.84
	6H	23.62	24.49	24.07	24.93	25.39	21.30	22.18	21.76	22.62	23.08
	8H	23.80	24.62	24.26	25.06	25.53	21.41	22.22	21.87	22.67	23.13
	12H	23.94	24.67	24.42	25.14	25.61	21.49	22.22	21.97	22.70	23.17
8H	4H	23.14	23.96	23.60	24.40	24.87	21.29	22.11	21.75	22.55	23.02
	6H	23.82	24.49	24.31	24.98	25.46	21.69	22.36	22.18	22.85	23.33
	8H	24.05	24.66	24.57	25.17	25.66	21.84	22.45	22.35	22.96	23.44
	12H	24.24	24.78	24.75	25.27	25.83	21.98	22.51	22.49	23.00	23.57
12H	4H	23.13	23.87	23.62	24.34	24.81	21.33	22.06	21.81	22.54	23.01
	6H	23.81	24.42	24.32	24.92	25.41	21.74	22.34	22.25	22.85	23.34
	8H	24.09	24.62	24.59	25.11	25.68	21.94	22.47	22.44	22.96	23.53