

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: P243742

Luminaire Tested: S125RDRP-H1270D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243742
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-H1270D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

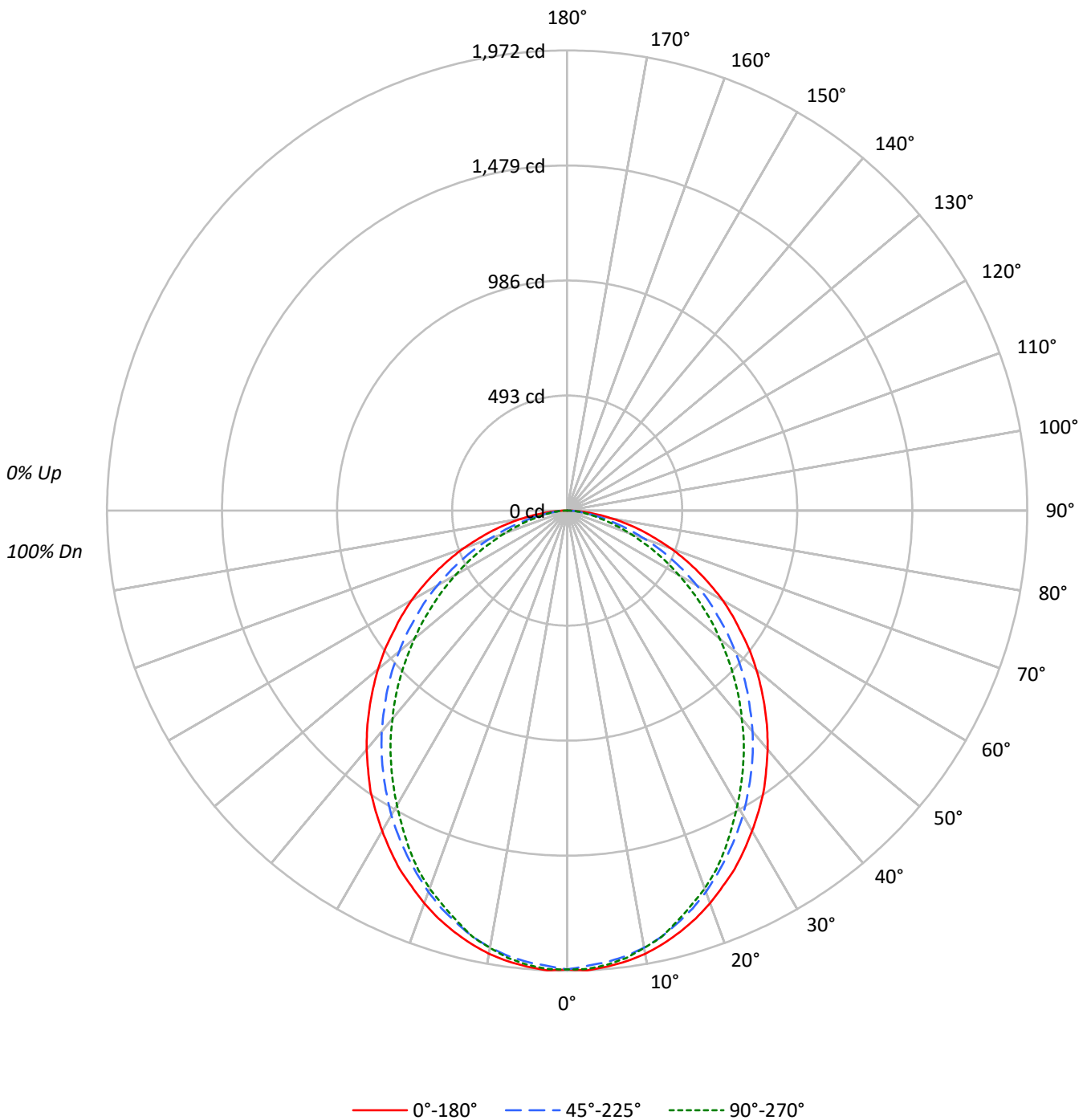
Lumens per Lamp: N/A
Luminaire Lumens: 4700.3 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): 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°	13977	13977	13977
5°	13999	13859	13939
10°	13918	13725	13735
15°	13755	13465	13403
20°	13543	13150	13033
25°	13303	12763	12553
30°	13010	12364	11971
35°	12741	11924	11423
40°	12398	11471	10806
45°	12045	10957	10166
50°	11696	10389	9441
55°	11277	9761	8680
60°	10937	9117	7858
65°	10408	8350	6954
70°	9821	7308	5933
75°	9037	6102	4828
80°	7944	4719	3974
85°	6768	3898	3670

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12045 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.2	3.9
10°-20°	518.8	11.0
20°-30°	754.9	16.1
30°-40°	864.6	18.4
40°-50°	846.0	18.0
50°-60°	714.3	15.2
60°-70°	500.1	10.6
70°-80°	254.0	5.4
80°-90°	62.5	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°	1458.9	31.0
0°-40°	2323.5	49.4
0°-60°	3883.8	82.6
0°-90°	4700.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4700.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1966	1966	1966	1966	1966	
5°	1962	1958	1942	1955	1954	186
15°	1869	1862	1830	1829	1822	527
25°	1696	1677	1628	1611	1601	780
35°	1468	1433	1374	1334	1317	917
45°	1198	1159	1090	1032	1011	925
55°	910	871	788	724	700	817
65°	619	571	496	435	414	613
75°	329	288	222	186	176	348
85°	83	54	48	45	45	95
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1966.5	1966.5	1966.5	1966.5	1966.5
2.5°	1972.1	1967.9	1952.4	1966.5	1966.5
5°	1962.2	1958.0	1942.5	1955.2	1953.8
7.5°	1948.2	1943.9	1925.7	1938.3	1934.1
10°	1928.5	1922.8	1901.7	1908.8	1903.2
12.5°	1901.7	1896.1	1870.8	1873.6	1870.8
15°	1869.4	1862.4	1830.0	1828.6	1821.6
17.5°	1832.8	1823.0	1787.8	1783.6	1772.3
20°	1790.6	1778.0	1738.6	1730.1	1723.1
22.5°	1742.8	1730.1	1683.7	1671.1	1666.8
25°	1696.4	1676.7	1627.5	1610.6	1600.7
27.5°	1641.5	1619.0	1568.4	1545.9	1529.0
30°	1585.3	1559.9	1506.5	1476.9	1458.7
32.5°	1527.6	1498.0	1440.4	1403.8	1388.3
35°	1468.5	1433.3	1374.3	1333.5	1316.6
37.5°	1401.0	1365.8	1306.7	1258.9	1243.4
40°	1336.3	1299.7	1236.4	1184.4	1164.7
42.5°	1268.8	1230.8	1161.9	1107.0	1090.1
45°	1198.4	1159.1	1090.1	1032.5	1011.4
47.5°	1128.1	1088.7	1017.0	959.3	932.6
50°	1057.8	1015.6	939.6	880.5	853.8
52.5°	987.4	941.0	866.5	803.2	779.3
55°	910.1	870.7	787.7	724.4	700.5
57.5°	841.2	797.6	718.8	654.1	627.4
60°	769.4	721.6	641.4	578.1	552.8
62.5°	693.5	645.6	568.3	505.0	482.5
65°	618.9	571.1	496.5	434.6	413.5
67.5°	544.4	499.3	424.8	367.1	343.2
70°	472.6	426.2	351.7	299.6	285.5
72.5°	396.7	360.1	285.5	239.1	227.9
75°	329.1	288.4	222.2	185.7	175.8
77.5°	260.2	220.8	164.6	139.3	130.8
80°	194.1	160.4	115.3	99.9	97.1
82.5°	133.6	101.3	76.0	73.1	71.7
85°	83.0	53.5	47.8	45.0	45.0
87.5°	35.2	22.5	22.5	21.1	22.5
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	20.59	22.17	20.95	22.48	22.80	19.08	20.66	19.44	20.97	21.29
	3H	22.35	23.77	22.73	24.10	24.46	20.36	21.78	20.74	22.11	22.47
	4H	23.01	24.34	23.41	24.69	25.07	20.75	22.08	21.14	22.43	22.81
	6H	23.48	24.71	23.89	25.08	25.47	20.98	22.22	21.39	22.58	22.97
	8H	23.62	24.80	24.05	25.19	25.59	21.06	22.24	21.48	22.62	23.02
	12H	23.72	24.85	24.15	25.23	25.66	21.11	22.24	21.54	22.62	23.05
4H	2H	20.99	22.32	21.39	22.67	23.05	19.76	21.10	20.16	21.45	21.82
	3H	22.95	24.06	23.36	24.46	24.86	21.23	22.34	21.64	22.74	23.14
	4H	23.73	24.73	24.16	25.15	25.59	21.69	22.70	22.13	23.11	23.55
	6H	24.32	25.20	24.78	25.64	26.10	22.01	22.89	22.47	23.33	23.79
	8H	24.51	25.33	24.97	25.77	26.24	22.12	22.93	22.58	23.38	23.84
	12H	24.65	25.38	25.13	25.85	26.32	22.20	22.93	22.68	23.41	23.88
8H	4H	23.85	24.67	24.31	25.11	25.58	22.00	22.82	22.46	23.26	23.73
	6H	24.53	25.20	25.02	25.69	26.17	22.40	23.07	22.89	23.56	24.04
	8H	24.76	25.37	25.28	25.88	26.37	22.55	23.16	23.06	23.66	24.15
	12H	24.95	25.49	25.46	25.98	26.54	22.69	23.22	23.20	23.71	24.28
12H	4H	23.84	24.58	24.33	25.05	25.52	22.04	22.77	22.52	23.25	23.72
	6H	24.52	25.13	25.03	25.63	26.12	22.45	23.05	22.96	23.56	24.05
	8H	24.80	25.33	25.30	25.82	26.39	22.65	23.18	23.15	23.67	24.24