

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: P243753

Luminaire Tested: S125RDRP-H375D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243753
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-H375D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

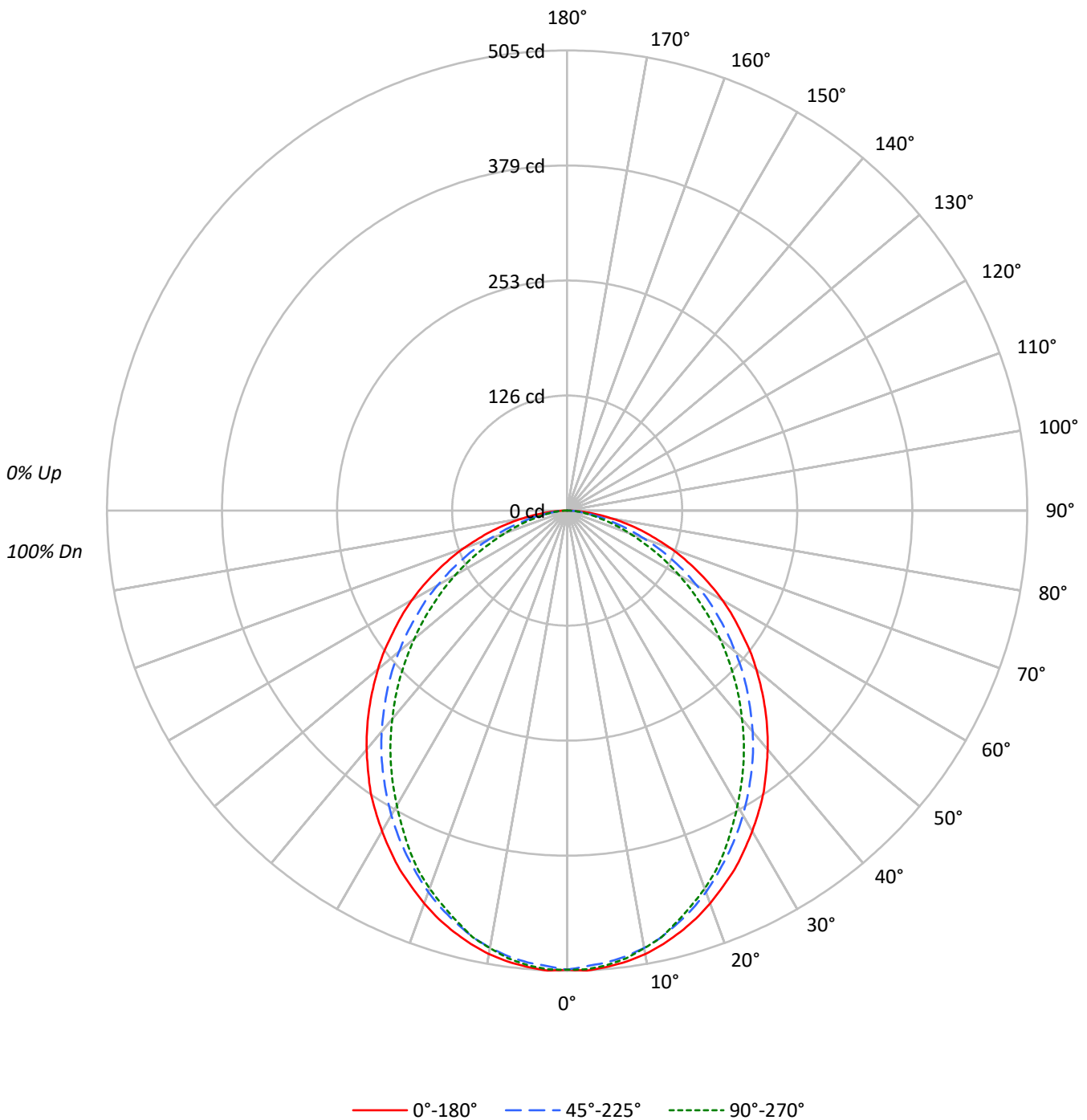
Lumens per Lamp: N/A
Luminaire Lumens: 1204.4 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.2
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	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	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°	3581	3581	3581
5°	3587	3552	3572
10°	3567	3517	3520
15°	3525	3450	3435
20°	3470	3370	3339
25°	3409	3270	3217
30°	3334	3168	3068
35°	3265	3056	2927
40°	3177	2939	2769
45°	3087	2807	2605
50°	2998	2663	2419
55°	2890	2501	2224
60°	2803	2337	2014
65°	2667	2139	1783
70°	2517	1872	1521
75°	2315	1563	1238
80°	2034	1212	1019
85°	1737	1003	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3087 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	3.9
10°-20°	132.9	11.0
20°-30°	193.4	16.1
30°-40°	221.5	18.4
40°-50°	216.8	18.0
50°-60°	183.0	15.2
60°-70°	128.1	10.6
70°-80°	65.1	5.4
80°-90°	16.0	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°	373.8	31.0
0°-40°	595.4	49.4
0°-60°	995.2	82.6
0°-90°	1204.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	504	504	504	504	504	
5°	503	502	498	501	501	48
15°	479	477	469	469	467	135
25°	435	430	417	413	410	200
35°	376	367	352	342	337	235
45°	307	297	279	265	259	237
55°	233	223	202	186	180	209
65°	159	146	127	111	106	157
75°	84	74	57	48	45	89
85°	21	14	12	12	12	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	503.9	503.9	503.9	503.9	503.9
2.5°	505.3	504.3	500.3	503.9	503.9
5°	502.8	501.7	497.8	501.0	500.7
7.5°	499.2	498.1	493.4	496.7	495.6
10°	494.2	492.7	487.3	489.1	487.7
12.5°	487.3	485.9	479.4	480.1	479.4
15°	479.0	477.2	468.9	468.6	466.8
17.5°	469.7	467.1	458.1	457.0	454.2
20°	458.8	455.6	445.5	443.3	441.5
22.5°	446.6	443.3	431.4	428.2	427.1
25°	434.7	429.6	417.0	412.7	410.2
27.5°	420.6	414.9	401.9	396.1	391.8
30°	406.2	399.7	386.0	378.5	373.8
32.5°	391.4	383.9	369.1	359.7	355.8
35°	376.3	367.3	352.2	341.7	337.4
37.5°	359.0	350.0	334.9	322.6	318.6
40°	342.4	333.0	316.8	303.5	298.4
42.5°	325.1	315.4	297.7	283.7	279.3
45°	307.1	297.0	279.3	264.6	259.2
47.5°	289.1	279.0	260.6	245.8	239.0
50°	271.1	260.2	240.8	225.6	218.8
52.5°	253.0	241.1	222.0	205.8	199.7
55°	233.2	223.1	201.8	185.6	179.5
57.5°	215.5	204.4	184.2	167.6	160.8
60°	197.2	184.9	164.4	148.1	141.7
62.5°	177.7	165.4	145.6	129.4	123.6
65°	158.6	146.3	127.2	111.4	106.0
67.5°	139.5	128.0	108.9	94.1	87.9
70°	121.1	109.2	90.1	76.8	73.2
72.5°	101.6	92.3	73.2	61.3	58.4
75°	84.3	73.9	56.9	47.6	45.1
77.5°	66.7	56.6	42.2	35.7	33.5
80°	49.7	41.1	29.6	25.6	24.9
82.5°	34.2	26.0	19.5	18.7	18.4
85°	21.3	13.7	12.3	11.5	11.5
87.5°	9.0	5.8	5.8	5.4	5.8
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	15.86	17.44	16.22	17.75	18.07	14.35	15.93	14.71	16.24	16.55
	3H	17.62	19.04	18.00	19.37	19.73	15.63	17.05	16.00	17.38	17.74
	4H	18.28	19.61	18.67	19.96	20.34	16.02	17.35	16.41	17.70	18.08
	6H	18.75	19.98	19.16	20.35	20.74	16.25	17.49	16.66	17.85	18.24
	8H	18.89	20.07	19.32	20.46	20.86	16.33	17.51	16.75	17.89	18.29
	12H	18.99	20.11	19.42	20.50	20.93	16.38	17.51	16.81	17.89	18.32
4H	2H	16.26	17.59	16.66	17.94	18.32	15.03	16.37	15.43	16.72	17.09
	3H	18.22	19.33	18.63	19.73	20.13	16.50	17.61	16.91	18.01	18.41
	4H	19.00	20.00	19.43	20.42	20.86	16.96	17.97	17.40	18.38	18.82
	6H	19.59	20.47	20.05	20.91	21.37	17.28	18.16	17.74	18.60	19.05
	8H	19.78	20.60	20.24	21.04	21.51	17.39	18.20	17.85	18.65	19.11
	12H	19.92	20.65	20.40	21.12	21.59	17.47	18.20	17.95	18.68	19.15
8H	4H	19.12	19.94	19.58	20.38	20.85	17.27	18.09	17.73	18.53	19.00
	6H	19.80	20.47	20.29	20.96	21.44	17.67	18.34	18.16	18.83	19.31
	8H	20.03	20.64	20.55	21.15	21.64	17.82	18.43	18.33	18.93	19.42
	12H	20.22	20.76	20.73	21.25	21.81	17.96	18.49	18.46	18.98	19.55
12H	4H	19.11	19.85	19.59	20.32	20.79	17.31	18.04	17.79	18.52	18.99
	6H	19.79	20.40	20.30	20.90	21.39	17.72	18.32	18.23	18.83	19.32
	8H	20.07	20.60	20.57	21.09	21.66	17.92	18.45	18.42	18.94	19.51