

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

IF03RMx xx DWDD1020 DLWFGPMW

Nom 3" diam Infinium, dim to warm 20L emitter - Wide flood optic, No lens

Test Number

SP-00942

Test Date

5/1/2019

The results contained in this report pertain only to this IES file.

Summary of Results

Power

Input Watts	21.7 W
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Lumen Output

Output Lumens	1186
Efficacy	54.66 lm/W

Luminous Dimensions

0° - 180° Size	-0.22
90° - 270° Size	-0.22
Height	0

Spacing Criterion

Two luminaires, plane 0°	0.9
Two luminaires, plane 90°	0.9
Four luminaires	0.83

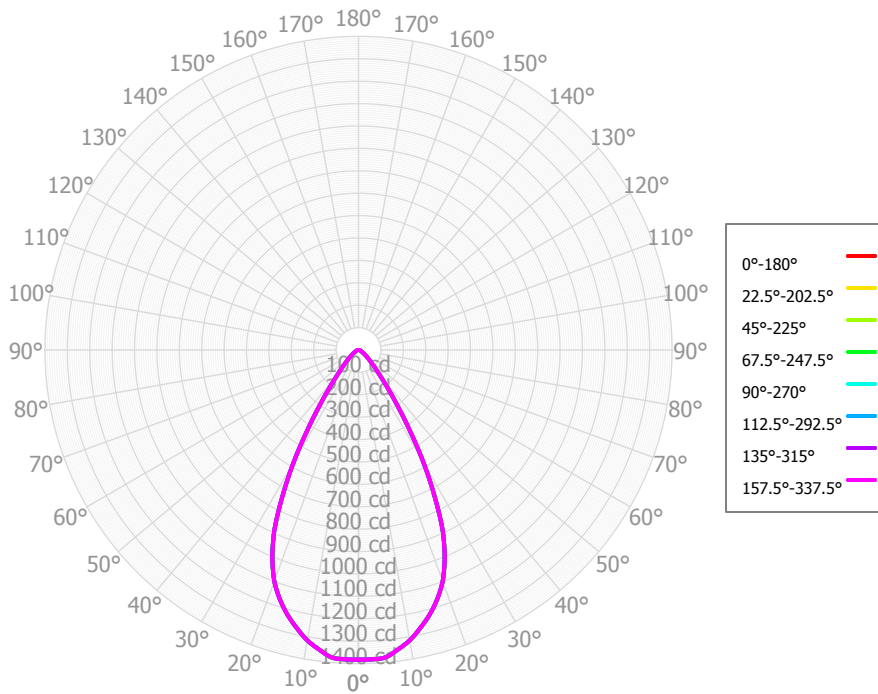
Full Beam Angle

0° - 180°	56°
90° - 270°	56°

IES File Header Contents

Keyword	Value
TEST	SP-00942
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	5/1/2019
ISSUEDATE	11/14/2019
LUMCAT	IF03RMx xx DWDD1020 DLWFGPMW
LUMINAIRE	Nom 3" diam Infinium, dim to warm 20L emitter - Wide flood optic, No lens
OTHER	Beam Angle: 56.4 degrees
LAMPCAT	N/A
LAMP	N/A
OTHER	CCT Output Multipliers: N/A - dim to warm
OTHER	Total luminaire wattage is approximate
OTHER	This report prepared by Spectrum Lighting
_CRI	95
_CCTMULT	N/A, dim to warm emitter
_LAMPMULT	7L x 0.38, 10L x 0.49, 15L x 0.8

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	131.14	11.06%	90.00° - 100.00°	0.18	0.02%
10.00° - 20.00°	341.50	28.79%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	392.82	33.12%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	198.99	16.78%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	69.32	5.84%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	30.23	2.55%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	13.88	1.17%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	6.15	0.52%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	1.82	0.15%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	1,185.83	99.98%	0.00° - 180.00°	1,186.02	100.00%

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	pfc	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	1,412	1,412	1,412	1,412	1,379	1,379	1,379	1,379	1,318	1,318	1,318	1,262	1,262	1,262	1,210	1,210	1,186
	1	1,344	1,310	1,280	1,253	1,315	1,285	1,257	1,233	1,236	1,215	1,195	1,192	1,175	1,159	1,152	1,138	1,115
	2	1,276	1,217	1,168	1,127	1,250	1,196	1,152	1,114	1,158	1,121	1,090	1,122	1,093	1,066	1,090	1,066	1,044
	3	1,211	1,133	1,074	1,026	1,187	1,117	1,062	1,017	1,086	1,039	1,001	1,057	1,018	985	1,030	998	978
	4	1,149	1,059	992	942	1,128	1,045	984	936	1,020	967	925	996	951	914	974	935	918
	5	1,092	992	922	870	1,072	980	915	866	959	902	859	939	890	851	921	878	862
	6	1,038	931	860	809	1,020	922	855	806	904	845	800	887	835	795	872	826	811
	7	987	877	805	755	971	869	801	753	854	793	749	839	785	745	826	778	765
	8	940	827	756	707	926	820	753	706	807	746	703	795	740	700	784	734	697
	9	896	782	712	665	883	776	709	664	765	704	661	755	699	659	745	694	657
	10	856	741	672	627	844	736	670	626	726	666	624	717	661	622	708	657	620

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	45.7 fc	5.9 ft
6.5 ft	32.7 fc	7.0 ft
7.5 ft	24.6 fc	8.0 ft
8.0 ft	21.6 fc	8.6 ft
10.0 ft	13.8 fc	10.7 ft
12.0 ft	9.6 fc	12.9 ft
14.0 ft	7.1 fc	15.0 ft
16.0 ft	5.4 fc	17.2 ft
20.0 ft	3.5 fc	21.4 ft
24.0 ft	2.4 fc	25.7 ft
28.0 ft	1.8 fc	30.0 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	391,536	391,536	391,536
45.00°	33,981	33,981	33,981
55.00°	16,174	16,174	16,174
65.00°	9,082	9,082	9,082
75.00°	6,286	6,286	6,286
85.00°	4,848	4,848	4,848

UGR CIE 190:2010

Ceiling reflectance		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall reflectance		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Plane reflectance		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				
2H	2H	14.2	15.2	14.6	15.5	15.8	14.2	15.2	14.6	15.5	15.8
	3H	14.9	15.8	15.3	16.1	16.5	14.9	15.8	15.3	16.1	16.5
	4H	15.1	16.0	15.6	16.3	16.7	15.1	16.0	15.6	16.3	16.7
	6H	15.3	16.0	15.7	16.4	16.8	15.3	16.0	15.7	16.4	16.8
	8H	15.3	16.0	15.7	16.4	16.8	15.3	16.0	15.7	16.4	16.8
	12H	15.3	15.9	15.7	16.3	16.8	15.3	15.9	15.7	16.3	16.8
4H	2H	14.3	15.2	14.7	15.5	15.9	14.3	15.2	14.7	15.5	15.9
	3H	15.2	15.9	15.7	16.3	16.7	15.2	15.9	15.7	16.3	16.7
	4H	15.6	16.2	16.0	16.6	17.0	15.6	16.2	16.0	16.6	17.0
	6H	15.8	16.3	16.2	16.7	17.2	15.8	16.3	16.2	16.7	17.2
	8H	15.8	16.2	16.2	16.7	17.2	15.8	16.2	16.2	16.7	17.2
	12H	15.8	16.2	16.3	16.7	17.2	15.8	16.2	16.3	16.7	17.2
8H	4H	15.6	16.1	16.1	16.5	17.0	15.6	16.1	16.1	16.5	17.0
	6H	15.8	16.2	16.4	16.7	17.2	15.8	16.2	16.4	16.7	17.2
	8H	15.9	16.2	16.4	16.8	17.3	15.9	16.2	16.4	16.8	17.3
	12H	16.0	16.3	16.5	16.8	17.3	16.0	16.3	16.5	16.8	17.3
12H	4H	15.5	16.0	16.0	16.5	16.9	15.5	16.0	16.0	16.5	16.9
	6H	15.8	16.2	16.4	16.6	17.2	15.8	16.2	16.4	16.6	17.2
	8H	15.9	16.2	16.4	16.7	17.3	15.9	16.2	16.4	16.7	17.3

Corrected UGR values based on total output lumens

SHR = 1.0