

**IES INDOOR REPORT**
**PHOTOMETRIC FILENAME : SP-00629\_4 ~ C1216XT-13LXXK-MDEX-TCY-SOXXMW.IES**
**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00629\_4\_M-13L  
 [TESTLAB] VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUE DATE] 9/20/2017  
 [UPDATE] 3/9/2018  
 [LUMCAT] C1216XT-13L-xxK-MD-EX-TCY-SO  
 [LUMINAIRE] Nom. 12" Diam. x 16" H. Accent Biaxial Adjustable Downlight Cylinder  
 [OTHER] Internal Reflector, Medium Beam  
 [OTHER] Solite Lens, Flush with Lower Trim  
 [OTHER] 25.2 Degree Beam Angle  
 [OTHER] Aimed at 0 Degrees (Nadir)  
 [LAMPCAT] N/A, 19mm LES  
 [LAMP] N/A, 83 CRI  
 [OTHER] Total Luminaire Watts is approximate  
 [OTHER] LEDXT lumen output is the same for all available CCT's  
 [OTHER] This report prepared by Spectrum Lighting, scaled from 30L

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1192
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	92
Total Luminaire Watts	13
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.42
Spacing Criterion (90-270)	0.44
Spacing Criterion (Diagonal)	0.46
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.44 ft (Diameter)
Luminous Width (90-270)	0.44 ft (Diameter)
Luminous Height	0.00 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00629\_4 ~ C1216XT-13LXXK-MDEX-TCY-SOXXMW.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	11302	11976	11898
55	4276	4464	4417
65	2994	2966	3037
75	2960	3051	3325
85	2385	2121	2612

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : SP-00629\_4 ~ C1216XT-13LXXK-MDEX-TCY-SOXXMW.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
<b>0</b>	3088.603	3088.603	3088.603	3088.603	3088.603	3088.603	3088.603	3088.603	3088.603	3088.603
<b>5</b>	2718.389	2751.507	2707.423	2747.958	2728.380	2713.127	2744.980	2710.225	2752.724	2724.050
<b>10</b>	1916.600	1966.413	1910.414	1966.104	1930.013	1905.837	1946.402	1903.967	1962.990	1920.650
<b>15</b>	1166.254	1205.969	1170.476	1220.763	1183.474	1153.152	1182.058	1158.451	1201.811	1154.563
<b>20</b>	714.068	733.903	722.054	759.021	729.531	699.193	712.884	710.662	732.120	689.798
<b>25</b>	510.904	520.288	519.092	539.302	521.403	500.226	504.162	507.388	513.611	488.011
<b>30</b>	411.661	423.749	421.996	436.870	424.832	413.869	417.126	411.939	412.098	396.542
<b>35</b>	317.617	329.961	326.283	342.880	333.179	326.038	329.613	319.635	320.258	304.833
<b>40</b>	207.477	218.517	214.621	225.152	218.107	214.864	218.139	206.596	209.490	200.457
<b>45</b>	114.028	124.303	120.825	123.706	120.039	121.577	122.399	113.290	117.249	114.574
<b>50</b>	59.409	66.433	64.554	65.726	63.171	65.550	65.125	61.548	63.991	61.536
<b>55</b>	34.995	37.079	36.531	37.998	36.146	38.013	37.426	38.275	39.803	36.721
<b>60</b>	23.757	23.742	23.978	25.248	23.862	25.884	26.951	27.588	28.834	26.462
<b>65</b>	18.054	18.414	17.884	19.184	18.315	21.440	21.552	22.754	23.094	22.178
<b>70</b>	14.434	14.834	13.799	15.534	14.852	19.058	19.840	20.454	19.614	19.917
<b>75</b>	10.931	11.024	11.266	12.438	12.278	16.150	17.343	17.625	17.681	17.725
<b>80</b>	6.794	7.217	6.909	7.783	7.894	13.254	13.465	14.362	15.006	14.124
<b>85</b>	2.966	3.038	2.638	2.894	3.248	8.784	9.013	10.407	9.606	9.862
<b>90</b>	0.806	0.626	0.883	0.750	0.799	5.211	4.233	5.688	4.639	5.420
<b>95</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>130</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>135</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>140</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>145</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>150</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>155</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>160</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>165</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>170</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>175</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>180</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert. Angles**      **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
<b>0</b>	3088.603	3088.603	3088.603	3088.603	3088.603	3088.603	3088.603
<b>5</b>	2771.916	2728.182	2750.873	2755.419	2724.357	2757.973	2718.389
<b>10</b>	1984.098	1924.003	1949.093	1954.174	1909.124	1964.731	1916.600
<b>15</b>	1198.764	1158.093	1175.003	1169.903	1139.074	1195.020	1166.254
<b>20</b>	709.043	695.533	702.936	691.348	678.253	722.845	714.068
<b>25</b>	494.642	493.225	495.653	488.821	484.528	509.743	510.904
<b>30</b>	401.531	397.886	400.765	399.874	396.433	411.172	411.661
<b>35</b>	311.011	305.065	307.115	307.048	304.043	318.309	317.617
<b>40</b>	206.832	197.763	200.571	201.868	199.487	208.614	207.477
<b>45</b>	117.048	109.334	110.712	114.705	113.203	113.278	114.028

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00629\_4 ~ C1216XT-13LXXK-MDEX-TCY-SOXXMW.IES****CANDELA TABULATION - (Cont.)**

<b>50</b>	62.200	58.086	58.307	59.401	59.201	59.418	59.409
<b>55</b>	36.938	34.960	35.266	32.735	33.022	34.667	34.995
<b>60</b>	26.198	25.954	24.524	21.996	22.138	21.741	23.757
<b>65</b>	21.486	21.261	21.205	16.740	17.341	18.243	18.054
<b>70</b>	19.131	18.318	18.957	13.586	14.062	14.878	14.434
<b>75</b>	16.465	16.711	15.453	10.062	10.455	12.240	10.931
<b>80</b>	14.341	13.319	12.963	6.490	7.258	7.428	6.794
<b>85</b>	9.753	9.213	9.174	2.590	2.656	2.345	2.966
<b>90</b>	4.547	5.264	4.657	0.798	0.707	0.628	0.806
<b>95</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>130</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>135</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>140</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>145</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>150</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>155</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>160</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>165</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>170</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>175</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>180</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00629\_4 ~ C1216XT-13LXXK-MDEX-TCY-SOXXMW.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	577.43	N.A.	48.50
0-30	821.25	N.A.	68.90
0-40	1016.88	N.A.	85.30
0-60	1148.99	N.A.	96.40
0-80	1183.96	N.A.	99.30
0-90	1190.95	N.A.	99.90
10-90	954.07	N.A.	80.10
20-40	439.45	N.A.	36.90
20-50	536.01	N.A.	45.00
40-70	152.36	N.A.	12.80
60-80	34.97	N.A.	2.90
70-80	14.72	N.A.	1.20
80-90	6.99	N.A.	0.60
90-110	0.78	N.A.	0.10
90-120	0.78	N.A.	0.10
90-130	0.78	N.A.	0.10
90-150	0.78	N.A.	0.10
90-180	0.78	N.A.	0.10
110-180	0.00	N.A.	0.00
0-180	1191.73	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	236.88
10-20	340.55
20-30	243.81
30-40	195.64
40-50	96.56
50-60	35.54
60-70	20.25
70-80	14.72
80-90	6.99
90-100	0.78
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00629\_4 ~ C1216XT-13LXXK-MDEX-TCY-SOXXMW.IES

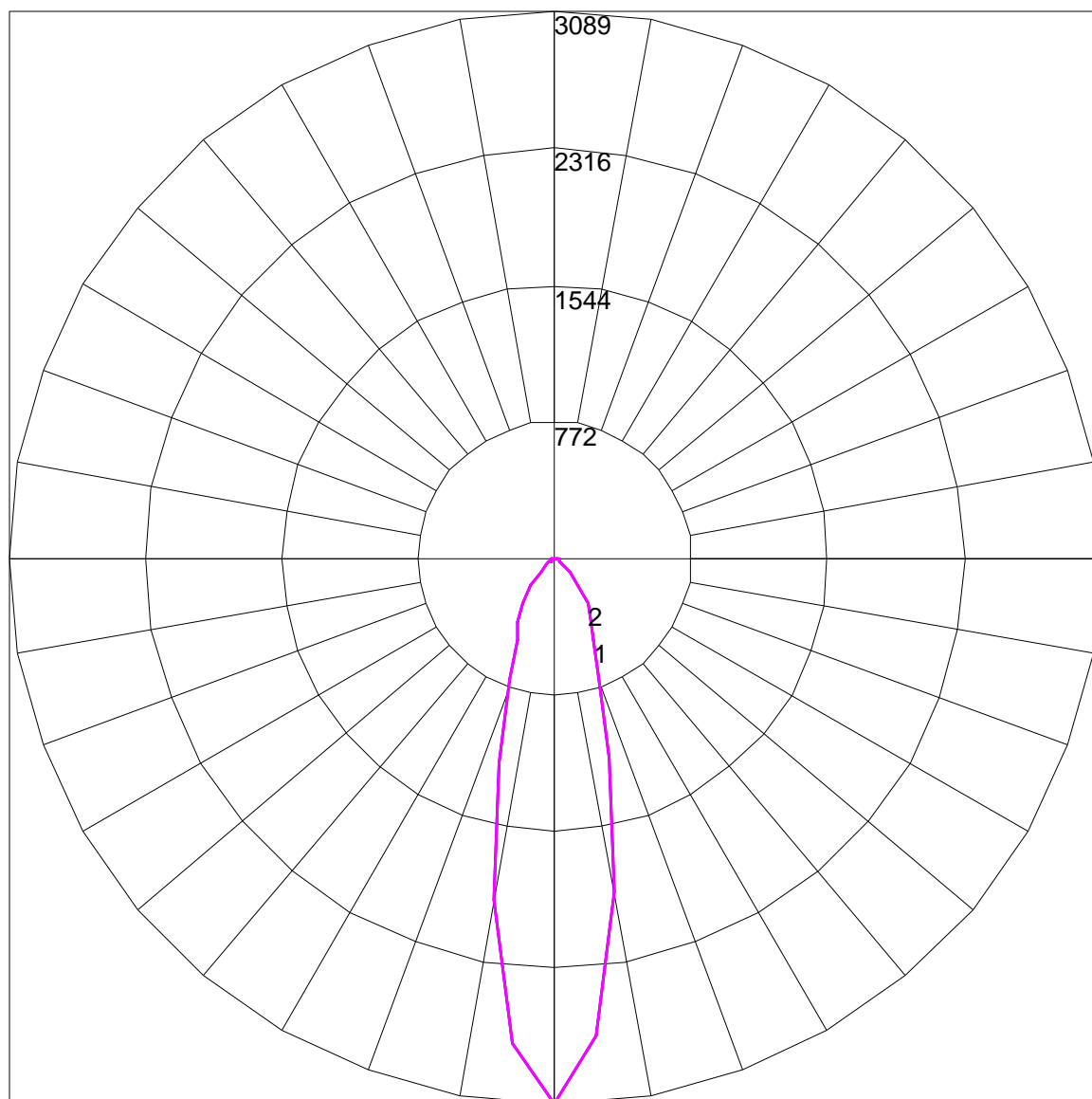
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

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
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80
4	97	90	84	80	95	88	83	79	86	82	78	84	81	77	82	79	77	75
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	70
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66
7	84	75	70	65	83	75	69	65	73	69	65	72	68	65	71	67	64	63
8	81	72	66	62	80	71	66	62	70	65	61	69	64	61	68	64	61	60
9	77	68	63	59	76	68	62	59	67	62	58	66	61	58	65	61	58	57
10	74	65	60	56	73	65	59	56	64	59	56	63	59	56	62	58	55	54

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00629\_4 ~ C1216XT-13LXXK-MDEX-TCY-SOXXMW.IES

POLAR GRAPH



Maximum Candela = 3088.603 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Vertical Plane Through Horizontal Angles (0 - 180)