



IES INDOOR REPORT

PHOTOMETRIC FILENAME : TESSQ12V.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]
[DATE] 2016-12-03
[MANUFAC] BEGHELLI
[TESTLAB]
[ISSUEDATE] 2016-12-03
[LUMCAT] L0315
[LUMCAT] TESTA - TESSQ12VD[_P
[LUMINAIRE] BEGHELLI LED EMERGENCY REMOTE HEAD
[MORE] PRISMATIC LENS WITH INDIVIDUAL LED LENS OPTICS
[LAMP] SIXTEEN WHITE LEDS. LUMEN OUTPUT = 2328 LMS.
[OTHER] 12VDC INPUT
[OTHER] ABSOLUTE PHOTOMETRY
[_VOLTAGE] 12.0 VDC
[_CURRENT] 2.25 ADC
[_WATTAGE] 27 MAX

CHARACTERISTICS

Lumens Per Lamp	2328 (1 lamp)
Total Lamp Lumens	2328
Luminaire Lumens	2328
Total Luminaire Efficiency	100 %
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	27
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.46
Spacing Criterion (90-270)	0.28
Spacing Criterion (Diagonal)	0.42
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.10 m
Luminous Width (90-270)	0.10 m
Luminous Height	0.15 m

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6798	4080	6277
55	4947	2806	3172
65	2829	1573	2380
75	1603	713	1151
85	700	224	349

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CANDELA TABULATION

	0	30	60	90	120	150	180	210	240	270
0	8786.494	8786.494	8786.494	8786.494	8786.494	8786.494	8786.494	8786.494	8786.494	8786.494
1	9296.957	7746.539	8191.195	8444.265	8555.896	8536.845	8605.109	8752.068	8973.492	9120.161
2	9471.945	7139.230	7659.836	7969.480	8087.248	8036.228	8088.507	9067.590	9226.853	9320.950
3	9509.145	6542.384	7111.879	7424.591	7592.185	7459.336	7498.410	9286.527	9360.023	9409.525
4	9418.729	5872.655	6477.510	6879.088	6993.788	6827.131	6920.615	9376.006	9386.147	9405.198
5	9182.871	5210.612	5833.291	6260.704	6364.037	6229.026	6281.015	9339.712	9300.671	9292.372
6	8814.811	4618.028	5242.871	5645.386	5795.478	5592.201	5640.478	9185.034	9112.475	9106.631
7	8369.250	4011.946	4613.733	5038.691	5171.248	4961.514	5049.767	8907.359	8827.115	8823.109
8	7792.361	3453.235	4023.959	4498.128	4570.365	4390.501	4429.542	8547.274	8490.409	8451.659
9	7148.143	2989.528	3488.273	3937.546	4007.037	3798.240	3852.974	8076.204	8050.047	8003.612
10	6527.303	2555.948	3049.171	3435.088	3542.102	3291.487	3336.986	7541.745	7534.383	7531.314
11	5857.283	2194.024	2634.966	3038.708	3095.606	2901.566	2922.491	6996.243	7016.231	6956.588
12	5194.917	1907.726	2291.189	2655.890	2711.239	2538.413	2551.653	6374.499	6415.994	6348.956
13	4600.203	1700.155	2036.279	2327.484	2409.570	2229.996	2256.733	5738.870	5806.521	5791.474
14	3989.826	1525.199	1805.651	2076.869	2122.045	1976.313	2026.107	5114.964	5244.098	5197.372
15	3430.179	1378.207	1607.607	1841.624	1877.275	1777.655	1806.556	4558.999	4660.168	4628.813
16	2922.491	1264.735	1452.026	1634.667	1682.040	1584.842	1616.842	3988.890	4120.510	4137.108
17	2510.740	1154.975	1310.266	1464.942	1500.302	1425.870	1474.469	3469.543	3625.124	3651.248
18	2152.496	1069.499	1190.948	1333.935	1353.311	1301.644	1344.398	3051.625	3221.382	3217.055
19	1876.371	983.378	1085.484	1208.482	1231.215	1190.335	1231.538	2667.871	2843.764	2840.695
20	1673.740	899.129	989.222	1074.698	1106.699	1082.416	1127.915	2354.836	2514.421	2539.350
21	1503.693	801.963	879.463	954.476	977.242	980.309	1029.813	2107.288	2249.984	2249.048
22	1366.840	710.029	778.584	838.873	860.378	871.778	927.416	1875.757	1995.365	1998.755
23	1262.894	618.062	686.649	731.858	765.667	777.680	830.864	1679.262	1772.133	1794.866
24	1166.955	524.900	587.320	632.851	659.912	685.713	743.547	1519.677	1587.942	1603.926
25	1085.774	454.473	510.466	546.440	569.173	588.871	636.824	1369.618	1416.666	1439.109
26	1019.060	400.675	452.955	481.533	501.231	508.302	548.280	1238.320	1272.129	1304.098
27	936.942	354.853	398.220	428.671	440.038	447.724	480.920	1130.691	1148.807	1167.569
28	843.780	313.971	350.558	382.527	389.598	396.993	418.822	1027.358	1027.972	1027.035
29	753.364	280.453	314.585	337.028	350.235	345.327	361.311	917.567	901.582	910.204
30	662.043	245.093	277.967	302.573	311.195	305.640	316.426	813.653	792.437	796.118
31	561.196	220.487	249.679	277.353	280.744	276.126	282.584	727.531	695.885	683.582
32	476.947	194.654	227.236	252.165	254.006	249.389	254.297	620.549	590.711	578.731
33	413.882	177.733	208.475	232.791	235.535	224.782	228.173	535.977	507.980	505.849
34	356.403	163.299	191.877	218.324	217.097	206.957	209.089	468.616	445.560	443.429
35	305.027	150.996	177.442	206.020	200.176	188.809	193.104	408.360	392.053	391.149
36	268.149	140.211	165.431	193.104	186.032	174.342	179.574	359.147	348.395	347.781
37	232.791	128.520	154.967	180.511	174.052	159.908	166.980	317.040	311.808	309.354
38	205.730	120.835	144.215	168.820	161.135	147.605	153.127	285.362	281.067	278.580
39	182.964	113.473	135.302	159.295	149.123	136.529	142.374	254.911	256.460	253.393
40	167.593	108.242	126.389	153.740	138.983	127.907	134.365	231.854	234.631	232.791
41	153.740	101.783	118.381	150.673	129.780	119.931	130.393	212.189	217.097	214.029
42	145.151	97.779	111.632	142.987	121.158	113.150	127.616	194.040	198.335	198.045
43	139.306	93.484	104.238	132.525	113.473	106.401	124.840	175.279	182.028	184.515
44	130.071	91.320	98.102	122.062	105.787	101.460	121.158	161.426	168.820	170.048
45	120.222	87.640	92.548	111.018	100.233	98.102	114.991	147.896	155.291	156.840
46	112.860	86.413	88.253	100.847	94.098	94.389	108.242	138.079	142.051	145.442
47	106.401	84.571	82.409	93.484	90.094	91.644	101.460	126.680	131.620	134.365
48	103.624	84.249	79.631	86.703	84.249	87.931	94.711	118.995	121.158	125.776
49	103.011	82.409	77.177	79.340	80.567	84.862	88.253	111.309	112.860	121.158
50	102.720	79.631	75.336	75.046	77.500	82.409	84.249	105.464	103.333	115.313
51	100.847	78.404	71.655	69.815	75.046	79.340	79.631	100.847	95.938	107.305
52	96.552	76.273	70.428	66.424	72.560	75.046	75.046	96.262	88.867	98.393
53	94.098	74.109	68.264	62.742	68.878	71.655	70.718	92.871	84.249	90.094

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CANDELA TABULATION - (Cont.)

54	91.031	69.491	66.424	60.580	66.101	68.587	66.101	89.803	79.954	83.022
55	89.189	66.101	63.647	57.189	64.260	64.260	62.742	86.703	76.273	75.950
56	86.413	61.806	61.193	54.734	61.516	60.256	58.416	82.409	72.269	70.105
57	82.409	57.511	58.738	52.894	57.511	56.284	54.444	80.245	70.428	64.874
58	78.727	53.184	56.898	51.053	55.057	52.894	51.667	77.177	66.715	62.129
59	75.660	49.826	54.444	49.503	52.894	48.889	47.662	73.787	63.647	58.416
60	71.655	46.726	51.667	48.276	50.440	45.822	45.822	69.491	60.580	55.962
61	66.715	43.658	48.889	47.985	48.276	43.367	42.431	66.101	57.511	53.507
62	62.129	41.527	47.049	47.340	45.209	40.591	40.267	63.356	55.057	50.116
63	58.416	38.427	44.272	44.272	43.982	37.813	37.523	59.966	53.184	47.340
64	53.798	36.296	41.527	42.431	40.913	35.682	35.069	56.575	50.116	45.209
65	50.440	34.455	39.364	42.431	38.427	33.518	33.809	52.894	47.340	42.431
66	47.340	32.291	37.523	40.591	35.973	31.355	32.291	50.116	44.885	40.267
67	44.595	29.515	36.296	38.136	35.069	29.838	30.742	46.726	42.431	39.040
68	42.754	27.997	33.518	34.455	32.582	27.060	27.997	43.658	39.040	37.523
69	40.913	25.833	30.451	31.969	29.838	25.833	25.833	40.267	36.587	37.200
70	37.200	24.283	28.287	29.224	27.997	23.993	24.283	39.040	35.069	36.296
71	35.682	22.152	26.447	27.060	26.447	22.442	22.442	36.587	34.132	35.682
72	34.132	20.280	24.283	24.897	24.283	20.925	21.216	34.455	31.969	34.455
73	31.678	19.052	21.829	23.380	21.829	19.052	18.762	31.355	29.838	33.518
74	29.838	17.211	19.375	21.829	19.375	17.211	17.825	29.224	27.997	31.355
75	27.383	15.371	17.534	19.666	17.534	15.984	15.984	27.383	26.447	29.224
76	25.511	14.144	15.984	17.534	15.984	14.467	14.144	25.220	24.283	27.060
77	23.993	12.917	14.758	15.984	14.467	13.207	12.594	23.669	22.442	24.606
78	21.829	11.980	13.207	14.467	12.917	11.980	11.367	21.538	20.925	22.442
79	20.280	10.753	11.689	12.917	11.980	11.076	10.140	19.989	19.666	19.989
80	19.052	9.526	11.076	11.367	10.753	10.140	9.235	18.148	17.534	18.438
81	17.534	8.299	9.526	9.849	9.849	8.913	7.685	16.598	15.694	15.984
82	15.984	7.395	8.622	8.913	8.913	8.009	7.072	14.144	14.144	14.758
83	13.853	7.072	7.685	8.009	7.685	7.395	6.135	12.594	11.980	12.594
84	12.303	5.522	6.749	6.749	6.749	6.135	5.522	11.367	11.367	10.753
85	11.076	4.618	5.231	5.522	5.845	5.522	4.909	10.462	9.849	8.913
86	9.849	4.618	5.231	5.231	4.909	5.231	4.618	9.235	8.009	7.685
87	8.299	4.909	5.231	5.522	5.231	4.909	4.618	8.299	7.395	6.458
88	7.072	4.618	5.522	5.522	4.909	4.909	4.295	7.072	5.845	5.845
89	6.135	4.618	5.231	5.522	4.909	4.295	4.295	6.458	5.231	4.618
90	5.522	4.618	5.231	5.231	4.909	4.618	4.004	5.845	4.295	4.004

**Vert.
Angles**

Horizontal Angles

	300	330	360
0	8786.494	8786.494	8786.494
1	9208.705	9240.705	9296.957
2	9384.306	9423.056	9471.945
3	9448.243	9483.635	9509.145
4	9409.203	9423.670	9418.729
5	9260.984	9232.083	9182.871
6	9000.552	8947.044	8814.811
7	8641.372	8516.210	8369.250
8	8235.176	7983.947	7792.361
9	7706.271	7386.454	7148.143
10	7109.425	6786.831	6527.303
11	6540.220	6121.397	5857.283
12	5896.615	5459.354	5194.917
13	5262.859	4872.357	4600.203
14	4703.536	4258.266	3989.826

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15	4127.872	3674.337	3430.179
16	3606.363	3187.863	2922.491
17	3143.591	2725.995	2510.740
18	2768.104	2352.382	2152.496
19	2428.655	2075.320	1876.371
20	2143.293	1828.999	1673.740
21	1923.097	1636.508	1503.693
22	1716.785	1483.382	1366.840
23	1540.569	1358.219	1262.894
24	1401.909	1239.547	1166.955
25	1271.806	1142.672	1085.774
26	1158.980	1064.268	1019.060
27	1055.355	982.151	936.942
28	947.114	881.917	843.780
29	835.159	791.824	753.364
30	738.607	697.112	662.043
31	641.442	595.329	561.196
32	546.440	501.844	476.947
33	468.616	436.357	413.882
34	412.978	377.296	356.403
35	361.311	330.569	305.027
36	316.426	292.433	268.149
37	277.967	253.069	232.791
38	249.679	221.391	205.730
39	224.460	198.335	182.964
40	206.344	180.187	167.593
41	188.809	163.299	153.740
42	174.342	149.769	145.151
43	159.295	138.693	139.306
44	148.832	129.780	130.071
45	137.465	120.545	120.222
46	127.003	113.764	112.860
47	117.154	107.015	106.401
48	109.178	102.397	103.624
49	101.783	97.779	103.011
50	95.002	93.484	102.720
51	89.480	89.803	100.847
52	84.571	88.253	96.552
53	80.245	87.026	94.098
54	77.500	85.476	91.031
55	75.336	83.958	89.189
56	71.946	82.118	86.413
57	70.718	80.567	82.409
58	68.587	77.177	78.727
59	66.424	75.046	75.660
60	63.033	71.332	71.655
61	60.256	68.264	66.715
62	57.802	64.583	62.129
63	55.962	60.256	58.416
64	52.894	55.671	53.798
65	49.503	52.280	50.440
66	46.113	48.889	47.340
67	44.595	44.885	44.595
68	41.204	41.527	42.754
69	37.200	38.427	40.913
70	34.746	36.909	37.200

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71	32.905	33.518	35.682
72	30.451	31.355	34.132
73	28.901	28.901	31.678
74	27.060	27.383	29.838
75	25.220	25.511	27.383
76	23.669	23.669	25.511
77	22.766	21.538	23.993
78	20.925	19.989	21.829
79	18.762	18.762	20.280
80	17.534	16.920	19.052
81	16.307	15.371	17.534
82	14.467	13.531	15.984
83	12.594	12.303	13.853
84	11.689	11.076	12.303
85	9.849	9.849	11.076
86	8.299	8.913	9.849
87	7.072	8.009	8.299
88	6.135	7.072	7.072
89	4.909	6.458	6.135
90	4.295	5.522	5.522

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1474.07	63.30	63.30
0-30	1909.27	82.00	82.00
0-40	2092.54	89.90	89.90
0-60	2252.21	96.70	96.80
0-80	2318.67	99.60	99.60
0-90	2327.82	100.00	100.00
10-90	1678.75	72.10	72.10
20-40	618.47	26.60	26.60
20-50	713.37	30.60	30.60
40-70	202.64	8.70	8.70
60-80	66.46	2.90	2.90
70-80	23.49	1.00	1.00
80-90	9.15	0.40	0.40
90-110	0.00	0.00	0.00
90-120	0.00	0.00	0.00
90-130	0.00	0.00	0.00
90-150	0.00	0.00	0.00
90-180	0.00	0.00	0.00
110-180	0.00	0.00	0.00
0-180	2327.82	100.00	100.00

Total Luminaire Efficiency = 100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	649.07
10-20	825.00
20-30	435.19
30-40	183.27
40-50	94.91
50-60	64.77
60-70	42.96
70-80	23.49
80-90	9.15
90-100	0.00
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

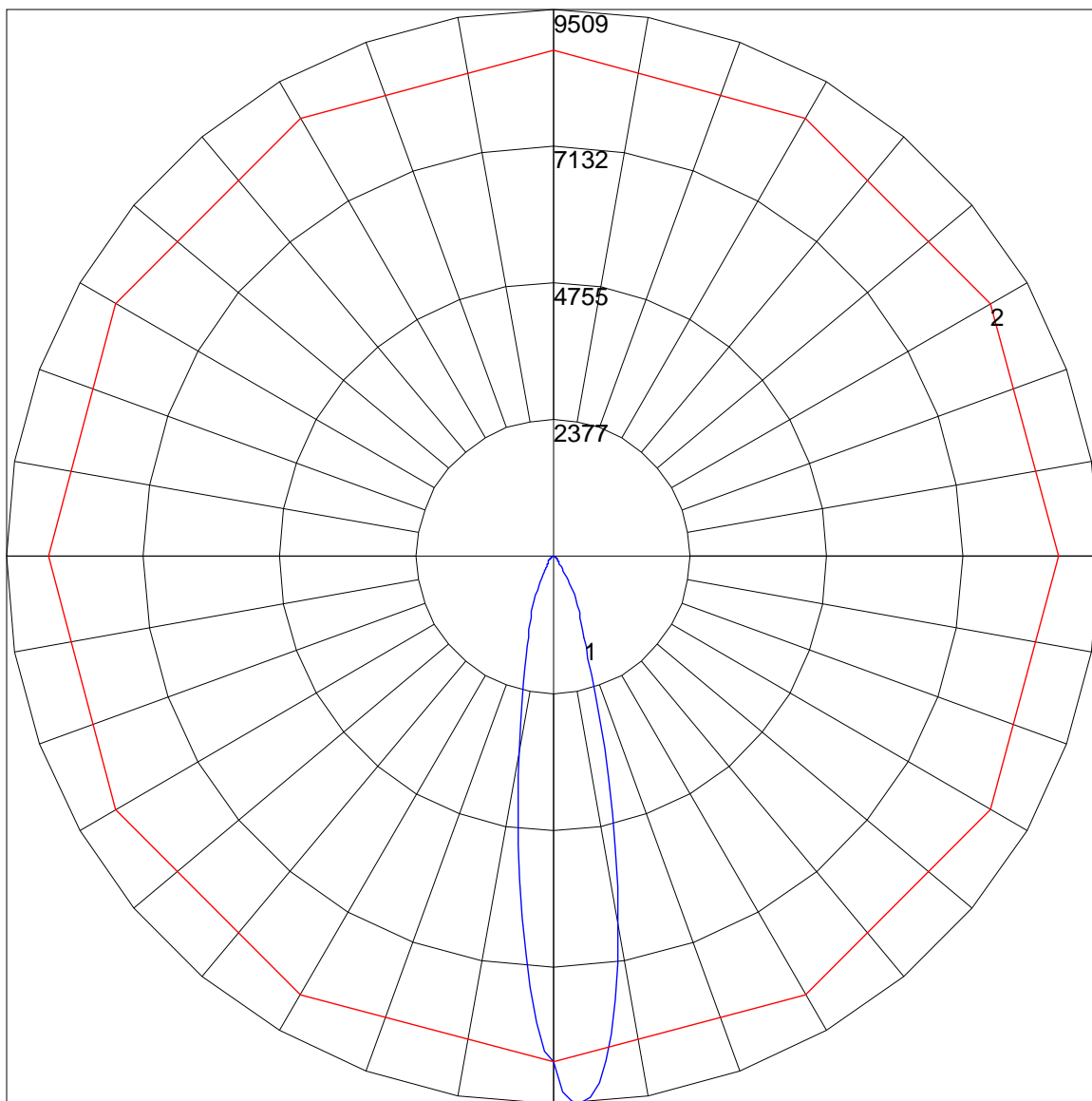
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	101	98	107	103	99	97	100	97	94	97	94	92	94	92	91	89
3	104	99	94	91	102	97	93	90	95	91	88	92	89	87	90	88	86	84
4	100	94	89	85	98	92	88	84	90	87	83	88	85	83	87	84	82	80
5	96	89	84	80	95	88	83	80	86	82	79	85	81	79	83	80	78	77
6	93	85	80	76	91	84	80	76	83	79	76	82	78	75	80	77	75	73
7	89	82	76	73	88	81	76	73	80	75	72	79	75	72	78	74	72	70
8	86	78	73	70	85	78	73	70	77	73	69	76	72	69	75	72	69	68
9	83	75	71	67	83	75	70	67	74	70	67	73	69	67	73	69	66	65
10	81	73	68	65	80	72	68	65	72	67	65	71	67	64	70	67	64	63

POLAR GRAPH



Maximum Candela = 9509.145 Located At Horizontal Angle = 0, Vertical Angle = 3
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0)