

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WINGRAIL-T21576.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-1995
[TEST] 21576
[MANUFAC]VODE LIGHTING - RAIL MOUNT LUMINAIRE - WING RAIL
[LUMCAT]100-TWG-48-AL
[LUMINAIRE]WITH DIFFUSE INTERIOR AND NO LENS - FIXTURE ANGLE SET TO 45 DEGREES
[LAMP]ONE PHILIPS 54 WATT T5 LAMP
[LAMPCAT]F54T5/841HO. LUMEN RATING = 4500 LMS.
[OTHER]ONE ADVANCE ICN-2S54 BALLAST OPERATING AT 120 VAC AND 55 WATTS

CHARACTERISTICS

Total Rated Lamp Lumens	4500
Total Luminaire Efficiency	45 %
CIE Type	Direct
Spacing Criteria (0-180)	1.32
Spacing Criteria (90-270)	1.24
Spacing Criteria (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.77 ft
Luminous Width (90-270)	0.14 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	16136	15508	14473
55	11527	13598	13388
65	4619	8765	11797
75	0	3133	9273
85	0	958	5096

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PHOTOMETRIC FILENAME : WINGRAIL-T21576.IES

CANDELA TABULATION

	<u>0</u>	<u>22.5</u>	<u>45</u>	<u>67.5</u>	<u>90</u>	<u>112.5</u>	<u>135</u>	<u>157.5</u>	<u>180</u>	<u>202.5</u>
0	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7
2.5	798.3	796.6	793.9	793.1	796.2	793	794.2	797.1	799.2	797.1
5	795.4	793.8	791.3	790.2	793.3	790.6	793.1	798.2	800.1	798.2
7.5	792.1	790.5	787.2	785.6	788.6	787.5	793.1	800.4	804.7	800.4
10	783.5	782.6	780.6	778.9	781.8	782.7	790.9	799.8	805.2	799.8
12.5	768.9	769.1	770.5	769.9	773.3	776.3	785.8	796.3	802.7	796.3
15	755.4	755.8	757.2	759.7	762.8	767.9	779.2	790	797.5	790
17.5	742.2	741.7	742.8	747.5	750.2	757	769.2	779.3	785.6	779.3
20	733.8	731	728.4	733.8	735.6	743.8	756.2	765.2	769.5	765.2
22.5	724.8	721.7	713.4	717.7	719.5	728.9	740.3	746.5	750.2	746.5
25	718.7	710.9	700	700.2	701.2	711.2	720.8	723.8	726.1	723.8
27.5	710.2	701.6	685.2	680.9	681.6	691.4	698.3	698.4	699.2	698.4
30	698.1	688.7	670.3	659.3	660.2	670.2	673.6	671.2	670.5	671.2
32.5	682.4	672.2	652.7	637	637.1	647.3	646.2	641.7	639.5	641.7
35	666.4	654.2	634	612.9	612.4	622.6	617.4	610.6	606.9	610.6
37.5	650.2	636.1	614.8	588.7	586.7	596.2	586.9	577.7	572.5	577.7
40	630	616.2	592.5	564	559.6	568	555.1	543.6	537.2	543.6
42.5	602.8	591	567.3	537.9	531.5	538.4	522.3	508.6	501	508.6
45	560	556.5	538.2	509.2	502.3	507.4	488.6	473.2	464.7	473.2
47.5	504.9	509	505.2	477.7	472	475.1	453.8	437.5	428	437.5
50	445.8	455.3	469.1	445.4	441.2	441.6	418.6	402.1	391.8	402.1
52.5	385.1	399.3	429.5	412.7	409.4	407.5	383	366.7	355.9	366.7
55	324.5	342.8	382.8	378.9	376.9	373.1	347.8	331.8	321.1	331.8
57.5	260.5	284.4	331.9	344.1	344.1	338.4	313.1	298.1	288	298.1
60	203.9	228.7	281	309.9	311.2	303.6	279.4	265.9	256.5	265.9
62.5	148.1	176.8	231.1	276.2	277.9	268.6	246	234.2	224.7	234.2
65	95.8	126.3	181.8	242.1	244.7	233.9	213.9	202.8	194.3	202.8
67.5	59.6	84.9	137.5	207.5	211.8	199.8	183.4	173.4	166.3	173.4
70	30	54.7	97.6	168.4	179.4	166.8	153.8	146.1	140.1	146.1
72.5	5.2	27	62.2	129.5	148	135.3	125.6	119.6	114.2	119.6
75	0	14.1	39.8	94.3	117.8	106	99.7	94.7	90.4	94.7
77.5	0	10	22.3	62.3	89.8	79.7	75.7	72.4	69.2	72.4
80	0	6.8	14.6	35.9	64.3	56.5	54.7	53.7	51.9	53.7
82.5	0	4	9	16.7	41.7	36.8	37.6	38.8	38.9	38.8
85	0	1.6	4.1	6.7	21.8	21	24.6	28.2	30	28.2
87.5	0	0	0.2	0.8	5	9	15.3	20.7	24.2	20.7
90	0	0	0	0	0	4	10.3	15.9	19.5	15.9
92.5	0	0	0	0	0	2.1	7	11.7	14.6	11.7
95	0	0	0	0	0	0.6	4.7	8.5	10.8	8.5
97.5	0	0	0	0	0	0	1.8	5.8	7.9	5.8
100	0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0

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PHOTOMETRIC FILENAME : WINGRAIL-T21576.IES

CANDELA TABULATION - (Cont.)

135	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles

	<u>225</u>	<u>247.5</u>	<u>270</u>	<u>292.5</u>	<u>315</u>	<u>337.5</u>	<u>360</u>
0	796.7	796.7	796.7	796.7	796.7	796.7	796.7
2.5	794.2	793	796.2	793.1	793.9	796.6	798.3
5	793.1	790.6	793.3	790.2	791.3	793.8	795.4
7.5	793.1	787.5	788.6	785.6	787.2	790.5	792.1
10	790.9	782.7	781.8	778.9	780.6	782.6	783.5
12.5	785.8	776.3	773.3	769.9	770.5	769.1	768.9
15	779.2	767.9	762.8	759.7	757.2	755.8	755.4
17.5	769.2	757	750.2	747.5	742.8	741.7	742.2
20	756.2	743.8	735.6	733.8	728.4	731	733.8
22.5	740.3	728.9	719.5	717.7	713.4	721.7	724.8
25	720.8	711.2	701.2	700.2	700	710.9	718.7
27.5	698.3	691.4	681.6	680.9	685.2	701.6	710.2
30	673.6	670.2	660.2	659.3	670.3	688.7	698.1
32.5	646.2	647.3	637.1	637	652.7	672.2	682.4
35	617.4	622.6	612.4	612.9	634	654.2	666.4
37.5	586.9	596.2	586.7	588.7	614.8	636.1	650.2
40	555.1	568	559.6	564	592.5	616.2	630
42.5	522.3	538.4	531.5	537.9	567.3	591	602.8
45	488.6	507.4	502.3	509.2	538.2	556.5	560
47.5	453.8	475.1	472	477.7	505.2	509	504.9
50	418.6	441.6	441.2	445.4	469.1	455.3	445.8
52.5	383	407.5	409.4	412.7	429.5	399.3	385.1
55	347.8	373.1	376.9	378.9	382.8	342.8	324.5
57.5	313.1	338.4	344.1	344.1	331.9	284.4	260.5
60	279.4	303.6	311.2	309.9	281	228.7	203.9
62.5	246	268.6	277.9	276.2	231.1	176.8	148.1
65	213.9	233.9	244.7	242.1	181.8	126.3	95.8
67.5	183.4	199.8	211.8	207.5	137.5	84.9	59.6
70	153.8	166.8	179.4	168.4	97.6	54.7	30
72.5	125.6	135.3	148	129.5	62.2	27	5.2
75	99.7	106	117.8	94.3	39.8	14.1	0
77.5	75.7	79.7	89.8	62.3	22.3	10	0
80	54.7	56.5	64.3	35.9	14.6	6.8	0

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82.5	37.6	36.8	41.7	16.7	9	4	0
85	24.6	21	21.8	6.7	4.1	1.6	0
87.5	15.3	9	5	0.8	0.2	0	0
90	10.3	4	0	0	0	0	0
92.5	7	2.1	0	0	0	0	0
95	4.7	0.6	0	0	0	0	0
97.5	1.8	0	0	0	0	0	0
100	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	620.04	13.8	30.6
0-40	1010.95	22.5	49.9
0-60	1721.93	38.3	85
0-90	2023.58	45	99.9
90-120	2.69	.1	.1
90-130	2.69	.1	.1
90-150	2.69	.1	.1
90-180	2.69	.1	.1
0-180	2026.28	45	100

Total Luminaire Efficiency = 45%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	75.56
10-20	216.81
20-30	327.67
30-40	390.91
40-50	392.33
50-60	318.65
60-70	198.53
70-80	83.86
80-90	19.26
90-100	2.69
100-110	0
110-120	0
120-130	0
130-140	0
140-150	0
150-160	0
160-170	0
170-180	0

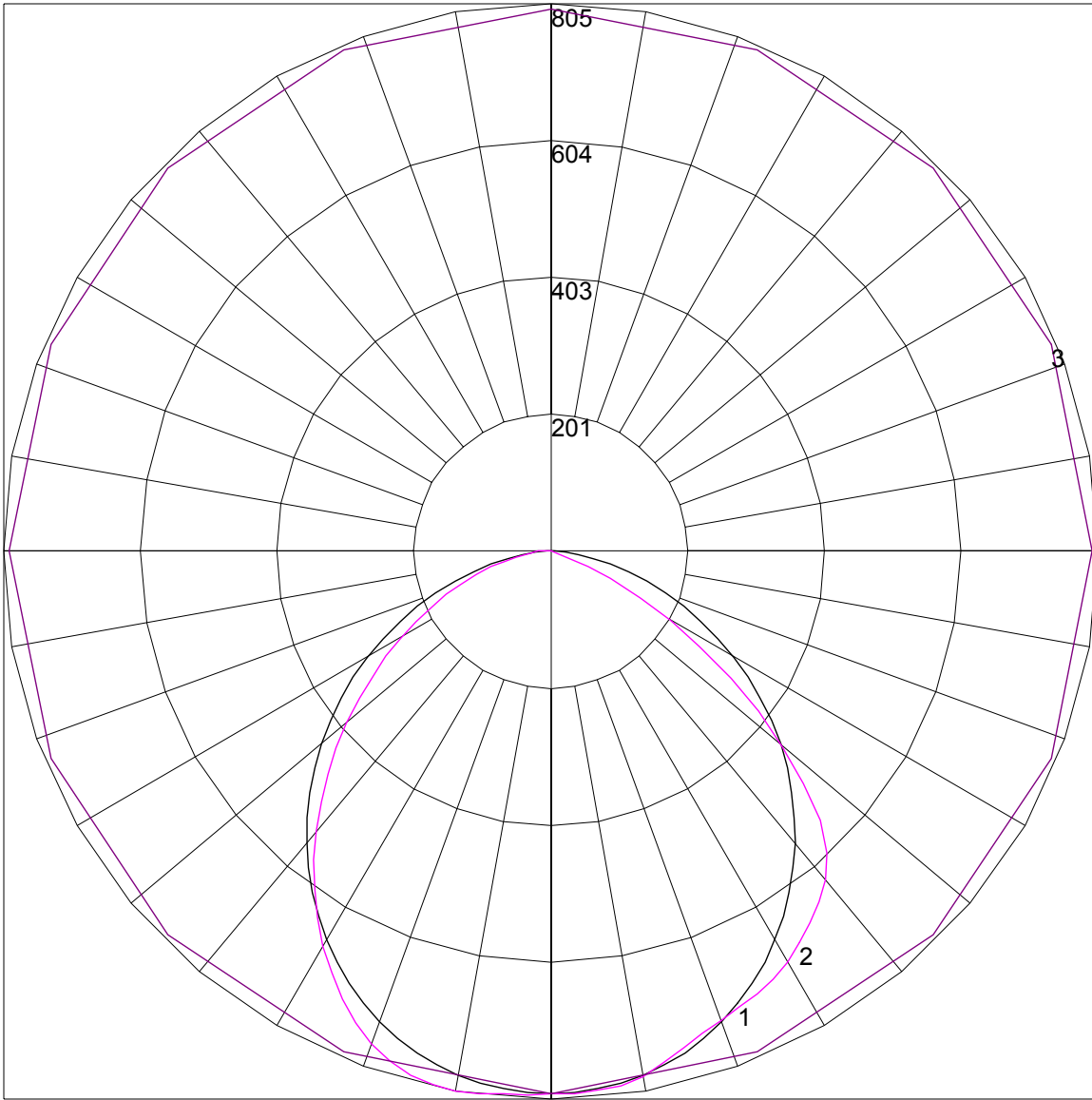
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	54	54	54	54	52	52	52	52	50	50	50	48	48	48	46	46	46	45	45
1	49	48	46	44	48	46	45	43	45	43	42	43	42	41	41	40	40	39	39
2	45	42	39	37	44	41	38	36	39	37	35	38	36	35	37	35	34	33	33
3	42	37	34	31	40	36	33	31	35	32	30	34	31	30	33	31	29	28	28
4	38	33	29	26	37	32	29	26	31	28	26	30	28	26	29	27	25	24	24
5	35	30	26	23	34	29	25	23	28	25	23	27	24	22	26	24	22	21	21
6	33	27	23	20	32	26	23	20	26	22	20	25	22	20	24	21	19	19	19
7	30	24	20	18	29	24	20	18	23	20	18	23	20	17	22	19	17	16	16
8	28	22	18	16	27	22	18	16	21	18	16	21	18	16	20	18	16	15	15
9	26	20	17	14	26	20	17	14	20	16	14	19	16	14	19	16	14	13	13
10	25	19	15	13	24	19	15	13	18	15	13	18	15	13	17	15	13	12	12

POLAR GRAPH



Maximum Candela = 805.2 Located At Horizontal Angle = 180, Vertical Angle = 10

1 - Vertical Plane Through Horizontal Angles (90 - 270)

2 - Vertical Plane Through Horizontal Angles (0 - 180)

3 - Horizontal Cone Through Vertical Angle (0)