

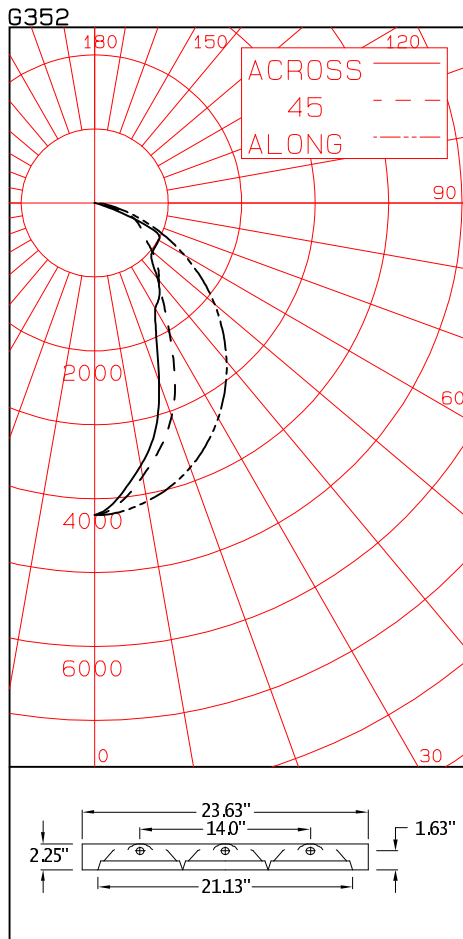


LIGHTING SCIENCES CANADA LTD.

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CERTIFIED TEST REPORT NO. LSC G352
 COMPUTED BY LSC PROGRAM **TEST-LITE**

KOJIN 2x4 TROFFER LUMINAIRE CAT. NO. T5T2x4G-L3UV
 WITH SPECULAR REFLECTORS AND SPECULAR/TANNENBAUM LOUVER
 THREE 28W T5 FLUORESCENT LAMPS. LUMEN RATING = 2600 LMS.
 ANTRON ELECTRONICS 120-277V 3-LAMP ELECTRONIC BALLAST NO. EPT-A28T5M



CANDLEPOWER SUMMARY

OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	4218	4218	4218	4218	4218	
5	4190	4147	4064	4000	3972	385
10	4100	3950	3755	3643	3610	
15	3974	3703	3436	3260	3192	972
20	3807	3423	3067	2701	2564	
25	3602	3139	2576	2094	1985	1217
30	3364	2824	2035	1688	1652	
35	3092	2472	1621	1515	1536	1236
40	2794	2062	1360	1358	1334	
45	2470	1625	1219	1123	1102	1113
50	2133	1248	1027	978	1029	
55	1774	951	844	939	1015	929
60	1404	744	741	908	1006	
65	1049	554	651	846	910	719
70	713	402	529	447	370	
75	427	264	227	50	9	236
80	222	123	50	5	1	
85	86	43	11	0	0	31
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	2573	33.00	37.64
0-40	3809	48.84	55.71
0-60	5851	75.02	85.57
0-90	6838	87.67	100.00
40-90	3028	38.83	44.29
60-90	986	12.65	14.43
90-180	0	.00	.00
0-180	6838	87.67	100.00

** EFFICIENCY = 87.7% **

LUMINANCE SUMMARY-CD. / SQ. M.

ANGLE	ALONG	45	ACROSS
45	5661	2806	2536
55	5013	2395	2878
65	4022	2506	3505
75	2675	1423	57
85	1593	205	0

S/MH = .7
 SC(ALONG) = 1.2, SC(ACROSS) = .7

CERTIFIED BY:

Charles Sison

DATE:
 JAN 2, 2013

PREPARED FOR:

KOJIN INC.
 MISSISSAUGA, ONTARIO

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

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 160 FROBISHER DRIVE, UNIT 5
 WATERLOO, ONTARIO

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CANDLEPOWER DATA
 IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
.0	4218	4218	4218	4218	4218	4218	
2.5	4216	4199	4175	4146	4134	4174	
5.0	4190	4147	4064	4000	3972	4073	385
7.5	4151	4056	3919	3815	3788	3940	
10.0	4100	3950	3755	3643	3610	3801	
12.5	4042	3831	3597	3464	3419	3656	
15.0	3974	3703	3436	3260	3192	3495	972
17.5	3896	3564	3260	3007	2897	3307	
20.0	3807	3423	3067	2701	2564	3094	
22.5	3709	3284	2840	2381	2246	2870	
25.0	3602	3139	2576	2094	1985	2651	1217
27.5	3487	2986	2297	1864	1790	2446	
30.0	3364	2824	2035	1688	1652	2264	
32.5	3231	2655	1809	1570	1596	2112	
35.0	3092	2472	1621	1515	1536	1981	1236
37.5	2947	2274	1470	1451	1448	1848	
40.0	2794	2062	1360	1358	1334	1711	
42.5	2634	1841	1292	1246	1202	1574	
45.0	2470	1625	1219	1123	1102	1438	1113
47.5	2303	1428	1128	1032	1046	1315	
50.0	2133	1248	1027	978	1029	1209	
52.5	1957	1090	924	957	1019	1115	
55.0	1774	951	844	939	1015	1032	929
57.5	1588	838	785	924	1011	961	
60.0	1404	744	741	908	1006	899	
62.5	1224	649	698	885	996	836	
65.0	1049	554	651	846	910	758	719
67.5	878	471	597	697	650	632	
70.0	713	402	529	447	370	480	
72.5	562	334	397	211	117	320	
75.0	427	264	227	50	9	190	236
77.5	309	187	102	13	2	114	
80.0	222	123	50	5	1	72	
82.5	151	80	26	1	0	45	
85.0	86	43	11	0	0	24	31
87.5	32	15	4	0	0	9	
90.0	0	0	0	0	0	0	

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AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M. (FOOTLAMBERTS)			
		22.5	45	67.5	ACROSS
0	6837(1995)	6837(1995)	6837(1995)	6837(1995)	6837(1995)
30	6297(1837)	5301(1547)	3818(1114)	3167(924)	3092(902)
40	5913(1725)	4375(1276)	2881(840)	2881(840)	2822(823)
45	5661(1652)	3730(1088)	2806(819)	2583(753)	2536(740)
50	5379(1570)	3158(921)	2591(756)	2474(722)	2594(757)
55	5013(1463)	2694(786)	2395(699)	2662(777)	2878(840)
60	4550(1328)	2420(706)	2404(701)	2951(861)	3261(951)
65	4022(1174)	2128(621)	2506(731)	3254(949)	3505(1023)
70	3378(986)	1912(558)	2513(733)	2121(619)	1751(511)
75	2675(780)	1661(485)	1423(415)	315(92)	57(16)
80	2073(605)	1152(336)	464(135)	45(13)	5(1)
85	1593(465)	810(236)	205(59)	0(0)	0(0)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	1.04	1.04	1.04	1.04	1.02	1.02	1.02	1.02	.97	.97	.97	.93	.93	.93	.89	.89	.89	.88			
1	.97	.94	.91	.88	.95	.92	.89	.87	.88	.86	.84	.85	.83	.82	.82	.81	.79	.78			
2	.90	.84	.80	.75	.88	.83	.78	.74	.80	.76	.73	.77	.74	.71	.75	.72	.70	.68			
3	.83	.76	.70	.65	.82	.74	.69	.65	.72	.67	.64	.70	.66	.62	.68	.64	.61	.60			
4	.77	.68	.62	.57	.76	.67	.61	.56	.65	.60	.56	.63	.59	.55	.61	.58	.54	.53			
5	.71	.61	.54	.49	.69	.60	.54	.49	.59	.53	.48	.57	.52	.48	.55	.51	.47	.46			
6	.66	.56	.49	.44	.65	.55	.48	.43	.53	.48	.43	.52	.47	.43	.51	.46	.42	.41			
7	.61	.51	.44	.39	.60	.50	.43	.39	.49	.43	.38	.47	.42	.38	.46	.42	.38	.36			
8	.57	.46	.39	.34	.56	.45	.39	.34	.44	.38	.34	.43	.38	.34	.42	.37	.34	.32			
9	.53	.42	.35	.30	.52	.41	.35	.30	.40	.34	.30	.40	.34	.30	.39	.34	.30	.28			
10	.49	.38	.32	.27	.48	.38	.32	.27	.37	.31	.27	.36	.31	.27	.36	.31	.27	.25			

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 79.6
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 BALLAST FACTORS HAVE NOT BEEN APPLIED.