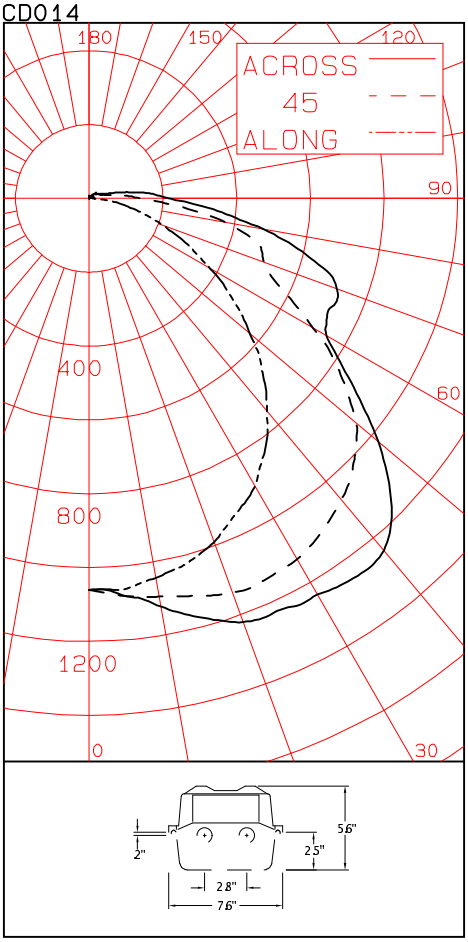
LIGHTING SCIENCES CANADA LTD.

440 Phillip St., Unit 19, Waterloo, Ontario, Canada N2L 5R9
Tel: (519) 746-3140 Fax: (519) 746-3156 lsc@lightingsciences.ca

CERTIFIED TEST REPORT NO. LSC D014
COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER LIGHTING 4' VAPOURTITE LUMINAIRE CAT. NO. TO 248-EL-HL-SR
WITH SPECULAR REFLECTOR AND PATTERNED ACRYLIC LENS
TWO F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE SYLVANIA 120-277V 2-LAMP ELECTRONIC BALLAST NO. QTP2x32T8/UNV ISH-SC

CD014



CANDLEPOWER SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	1061	1061	1061	1061	1061	
5	1064	1059	1081	1080	1080	104
15	1024	1053	1114	1164	1175	314
25	942	1010	1137	1215	1228	513
35	832	935	1102	1214	1255	671
45	664	819	1016	1136	1159	744
55	473	635	834	867	868	672
65	295	449	574	671	717	551
75	147	275	477	590	620	448
85	33	140	244	314	338	246
90	8	83	143	203	215	
95	18	44	96	131	163	100
105	7	30	41	47	53	40
115	0	9	25	25	28	20
125	0	2	19	24	19	12
135	0	0	2	17	13	4
145	0	0	3	7	9	2
155	0	0	1	3	0	1
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	930	15.78	20.95
0-40	1602	27.16	36.06
0-60	3018	51.16	67.94
0-90	4262	72.25	95.95
40-90	2660	45.09	59.88
60-90	1244	21.09	28.01
90-180	180	3.05	4.05
0-180	4442	75.30	100.00

** EFFICIENCY = 75.3% **

LUMINANCE SUMMARY-CD. / SQ. M.

ANGLE	ALONG	45	ACROSS
45	4522	5541	5964
55	3891	5084	4909
65	3180	4104	4659
75	2408	4274	4910
85	1200	3072	3561

S/MH = 1.7
SC(ALONG) = 1.3, SC(ACROSS) = 1.7

CERTIFIED BY:
Charles Lesson
DATE:
DEC 6, 2007

PREPARED FOR:
PIONEER LIGHTING
TORONTO, ONTARIO

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

LIGHTING SCIENCES CANADA LTD.
440 PHILLIP ST., UNIT 19
WATERLOO, ONTARIO

CERTIFIED TEST REPORT NO. LSC D014
COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER LIGHTING 4' VAPOURTITE LUMINAIRE CAT. NO. TO 248-EL-HL-SR
WITH SPECULAR REFLECTOR AND PATTERNED ACRYLIC LENS
TWO F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE SYLVANIA 120-277V 2-LAMP ELECTRONIC BALLAST NO. QTP2x32T8/UNV ISH-SC

CANDLEPOWER DATA

ANGLE	PLANE						OUTPUT
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	LUMENS
0	1061	1061	1061	1061	1061	1061	
5	1064	1059	1081	1080	1080	1073	104
10	1043	1056	1095	1114	1123	1087	
15	1024	1053	1114	1164	1175	1108	314
20	991	1036	1136	1200	1221	1120	
25	942	1010	1137	1215	1228	1112	513
30	899	979	1129	1206	1239	1096	
35	832	935	1102	1214	1255	1073	671
40	750	885	1066	1204	1244	1038	
45	664	819	1016	1136	1159	971	744
50	569	725	947	1021	1023	872	
55	473	635	834	867	868	752	672
60	379	546	702	732	743	635	
65	295	449	574	671	717	550	551
70	213	361	504	661	715	498	
75	147	275	477	590	620	431	448
80	88	207	378	459	479	332	
85	33	140	244	314	338	221	246
90	8	83	143	203	215	135	
95	18	44	96	131	163	90	100
100	15	34	56	84	98	58	
105	7	30	41	47	53	37	40
110	3	17	36	28	30	24	
115	0	9	25	25	28	18	20
120	0	2	23	26	24	16	
125	0	2	19	24	19	14	12
130	0	1	10	17	24	10	
135	0	0	2	17	13	6	4
140	0	0	4	1	12	3	
145	0	0	3	7	9	4	2
150	0	0	3	5	7	3	
155	0	0	1	3	0	1	1
160	0	0	1	1	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	

LIGHTING SCIENCES CANADA LTD.
440 PHILLIP ST., UNIT 19
WATERLOO, ONTARIO

CERTIFIED TEST REPORT NO. LSC D014
COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER LIGHTING 4' VAPOURTITE LUMINAIRE CAT. NO. TO 248-EL-HL-SR
WITH SPECULAR REFLECTOR AND PATTERNED ACRYLIC LENS
TWO F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE SYLVANIA 120-277V 2-LAMP ELECTRONIC BALLAST NO. QTP2x32T8/UNV ISH-SC

AVERAGE LUMINANCE DATA

CD. / SQ. M. (FOOTLAMBERTS)

ANGLE	ALONG	22.5	45	67.5	ACROSS
0	5370(1567)	5370(1567)	5370(1567)	5370(1567)	5370(1567)
30	5105(1490)	5147(1502)	5592(1632)	5779(1686)	5894(1720)
40	4749(1386)	5022(1465)	5568(1625)	6023(1758)	6166(1799)
45	4522(1319)	4893(1428)	5541(1617)	5885(1717)	5964(1740)
50	4221(1232)	4627(1350)	5415(1580)	5521(1611)	5471(1597)
55	3891(1135)	4372(1276)	5084(1484)	4943(1442)	4909(1432)
60	3527(1029)	4123(1203)	4591(1340)	4450(1299)	4457(1301)
65	3180(928)	3772(1101)	4104(1197)	4407(1286)	4659(1359)
70	2755(804)	3459(1009)	4000(1167)	4758(1388)	5064(1478)
75	2408(702)	3095(903)	4274(1247)	4745(1385)	4910(1433)
80	1981(578)	2837(828)	3953(1153)	4194(1224)	4299(1255)
85	1200(350)	2491(727)	3072(896)	3376(985)	3561(1039)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

LIGHTING SCIENCES CANADA LTD.
440 PHILLIP ST., UNIT 19
WATERLOO, ONTARIO

CERTIFIED TEST REPORT NO. LSC D014
COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER LIGHTING 4' VAPOURTITE LUMINAIRE CAT. NO. TO 248-EL-HL-SR
WITH SPECULAR REFLECTOR AND PATTERNED ACRYLIC LENS
TWO F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE SYLVANIA 120-277V 2-LAMP ELECTRONIC BALLAST NO. QTP2x32T8/UNV ISH-SC

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC	80				70				50			30			10			0
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	.89	.89	.89	.89	.86	.86	.86	.86	.82	.82	.82	.78	.78	.78	.74	.74	.74	.72
1	.80	.76	.73	.69	.78	.74	.71	.68	.70	.68	.65	.67	.65	.63	.64	.62	.60	.58
2	.72	.66	.60	.56	.70	.64	.59	.55	.61	.57	.53	.58	.54	.51	.55	.52	.50	.48
3	.66	.58	.51	.46	.64	.56	.50	.45	.54	.48	.44	.51	.47	.43	.49	.45	.42	.40
4	.60	.51	.44	.39	.58	.50	.43	.38	.47	.42	.37	.45	.40	.37	.43	.39	.36	.34
5	.55	.45	.38	.32	.53	.44	.37	.32	.42	.36	.31	.40	.35	.31	.38	.34	.30	.28
6	.50	.40	.33	.28	.49	.39	.32	.27	.37	.31	.27	.36	.30	.26	.34	.29	.26	.24
7	.46	.36	.29	.24	.45	.35	.28	.24	.33	.27	.23	.32	.27	.23	.31	.26	.22	.21
8	.42	.32	.25	.20	.41	.31	.25	.20	.30	.24	.20	.29	.23	.20	.27	.23	.19	.18
9	.39	.29	.22	.17	.38	.28	.22	.17	.27	.21	.17	.26	.20	.17	.25	.20	.16	.15
10	.36	.26	.19	.15	.35	.25	.19	.15	.24	.19	.15	.23	.18	.15	.23	.18	.14	.13

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
LUMINAIRE INPUT WATTS = 68.4
LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
BALLAST FACTORS HAVE NOT BEEN APPLIED.