



# 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

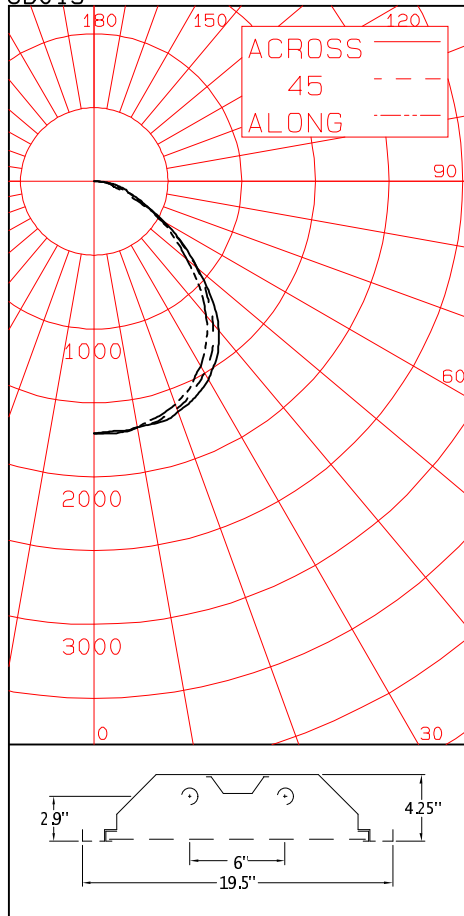
CERTIFIED TEST REPORT NO. LSCD019  
 COMPUTED BY LSC PROGRAM \*\*TEST-LITE\*\*

PIONEER LIGHTING 20"x60" RECESSED LUMINAIRE CAT. NO. TBAH 25-248-EL  
 WITH WHITE PAINTED INTERIOR AND FLAT PRISMATIC LENS  
 TWO F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.  
 ONE GE PROLINE 120V 1 OR 2-LAMP ELECTRONIC BALLAST NO. GE-232-120-N-84T

### CANDLEPOWER SUMMARY

OUTPUT  
LUMENS

CDO19



ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	1707	1707	1707	1707	1707	
5	1711	1706	1704	1698	1697	165
10	1690	1691	1693	1693	1690	
15	1650	1656	1679	1680	1691	472
20	1606	1623	1636	1653	1660	
25	1543	1550	1572	1597	1615	724
30	1444	1466	1496	1526	1549	
35	1324	1349	1397	1429	1454	864
40	1179	1200	1255	1296	1313	
45	1010	1034	1079	1109	1128	824
50	819	848	904	912	911	
55	660	677	717	717	731	625
60	519	501	517	524	550	
65	377	351	350	368	394	367
70	275	246	220	277	283	
75	189	171	140	192	222	192
80	127	116	116	146	154	
85	71	61	56	72	82	71
90	0	0	0	0	0	

### ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1360	23.05	31.60
0-40	2224	37.70	51.69
0-60	3672	62.25	85.35
0-90	4303	72.94	100.00
40-90	2078	35.24	48.31
60-90	630	10.69	14.65
90-180	0	.00	.00
0-180	4303	72.94	100.00

\*\* EFFICIENCY = 72.9% \*\*

LUMINANCE SUMMARY-CD. / SQ. M.

PAINT REFLECTANCE = .85 S/MH = 1.3  
 SC (ALONG) = 1.2, SC (ACROSS) = 1.3

ANGLE	ALONG	45	ACROSS
45	3046	3267	3415
55	2453	2674	2728
65	1900	1774	1995
75	1554	1153	1835
85	1733	1373	2020

CERTIFIED BY:

*Charles Sisson*

DATE:  
DEC 10, 2007

PREPARED FOR:

PIONEER LIGHTING  
 TORONTO, ONTARIO

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

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CANDLEPOWER DATA  
 IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
.0	1707	1707	1707	1707	1707	1707	
2.5	1709	1709	1705	1709	1699	1707	
5.0	1711	1706	1704	1698	1697	1703	165
7.5	1703	1715	1707	1703	1701	1707	
10.0	1690	1691	1693	1693	1690	1691	
12.5	1667	1683	1686	1687	1689	1684	
15.0	1650	1656	1679	1680	1691	1671	472
17.5	1631	1649	1652	1669	1686	1657	
20.0	1606	1623	1636	1653	1660	1636	
22.5	1573	1581	1612	1622	1640	1605	
25.0	1543	1550	1572	1597	1615	1575	724
27.5	1485	1501	1536	1563	1584	1534	
30.0	1444	1466	1496	1526	1549	1496	
32.5	1384	1406	1449	1483	1499	1445	
35.0	1324	1349	1397	1429	1454	1391	864
37.5	1261	1284	1326	1365	1386	1324	
40.0	1179	1200	1255	1296	1313	1249	
42.5	1095	1117	1167	1203	1234	1163	
45.0	1010	1034	1079	1109	1128	1073	824
47.5	909	947	1000	1010	1025	981	
50.0	819	848	904	912	911	882	
52.5	740	762	812	809	822	791	
55.0	660	677	717	717	731	701	625
57.5	597	593	619	618	641	612	
60.0	519	501	517	524	550	519	
62.5	447	419	428	447	463	437	
65.0	377	351	350	368	394	364	367
67.5	323	297	268	306	340	301	
70.0	275	246	220	277	283	256	
72.5	221	206	172	229	240	210	
75.0	189	171	140	192	222	177	192
77.5	156	142	128	164	188	152	
80.0	127	116	116	146	154	130	
82.5	106	85	88	111	125	100	
85.0	71	61	56	72	82	66	71
87.5	26	18	29	37	47	30	
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	3641( 1062)	3641( 1062)	3641( 1062)	3641( 1062)	3641( 1062)
30	3555( 1037)	3620( 1056)	3694( 1078)	3768( 1099)	3814( 1113)
40	3281( 957)	3349( 977)	3496( 1020)	3618( 1056)	3654( 1066)
45	3046( 889)	3123( 911)	3267( 953)	3353( 978)	3415( 996)
50	2716( 792)	2824( 824)	2998( 875)	3034( 885)	3021( 881)
55	2453( 715)	2522( 736)	2674( 780)	2672( 779)	2728( 796)
60	2214( 646)	2144( 626)	2208( 644)	2239( 653)	2346( 684)
65	1900( 554)	1775( 518)	1774( 517)	1862( 543)	1995( 582)
70	1714( 500)	1539( 449)	1373( 400)	1732( 505)	1765( 515)
75	1554( 453)	1415( 413)	1153( 336)	1589( 463)	1835( 535)
80	1563( 456)	1428( 417)	1428( 417)	1796( 524)	1890( 551)
85	1733( 506)	1494( 436)	1373( 400)	1774( 517)	2020( 589)

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	.87	.87	.87	.87	.85	.85	.85	.85	.81	.81	.81	.78	.78	.78	.74	.74	.74	.74	.74	.74	.73
1	.81	.78	.75	.72	.79	.76	.73	.71	.73	.71	.69	.70	.68	.67	.67	.66	.65	.65	.65	.65	.63
2	.74	.69	.65	.61	.73	.68	.64	.60	.65	.62	.59	.63	.60	.58	.61	.59	.57	.57	.57	.57	.55
3	.69	.62	.57	.53	.67	.61	.56	.52	.59	.55	.51	.57	.53	.50	.55	.52	.50	.50	.50	.50	.48
4	.63	.56	.50	.45	.62	.55	.49	.45	.53	.48	.45	.51	.47	.44	.50	.46	.43	.43	.43	.43	.42
5	.58	.50	.44	.39	.57	.49	.43	.39	.47	.42	.39	.46	.41	.38	.45	.41	.38	.38	.38	.38	.36
6	.54	.45	.39	.34	.52	.44	.38	.34	.43	.38	.34	.42	.37	.34	.40	.36	.33	.33	.33	.33	.32
7	.50	.40	.34	.30	.49	.40	.34	.30	.39	.33	.30	.38	.33	.29	.37	.32	.29	.29	.29	.29	.28
8	.46	.36	.30	.26	.45	.36	.30	.26	.35	.30	.26	.34	.29	.26	.33	.29	.26	.26	.26	.26	.24
9	.42	.33	.27	.23	.41	.32	.27	.23	.31	.26	.23	.31	.26	.22	.30	.25	.22	.22	.22	.22	.21
10	.39	.30	.24	.20	.38	.29	.24	.20	.29	.23	.20	.28	.23	.20	.27	.23	.20	.20	.20	.20	.18

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES  
 LUMINAIRE INPUT WATTS = 56.2  
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST FACTORS HAVE NOT BEEN APPLIED.