

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P95409

Luminaire Tested: **VFS-K-B40-3-LED-E1-TS-SG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95409
REPORT SCALED FROM IESNA LM79-08 TEST DATA (P22798)
Test Lab: INNOVATION CENTER
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VFS-K-B40-3-LED-E1-TS-SG
Description: ARCHITECTURAL FLOOD LUMINAIRE
TIGHT SPOT WITH SOFTENING GLASS DISTRIBUTION
WITH 40 LED'S, 350mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	4009.8 lumens	Max Intensity:	28333 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	89.1 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	17°H x 17.9°V	Field Angle (10%):	36.5°H x 38.1°V
Beam Lumens:	1525.4 lumens	Field Lumens:	3104 lumens
Beam Efficiency:	38.0%	Field Efficiency:	77.4%

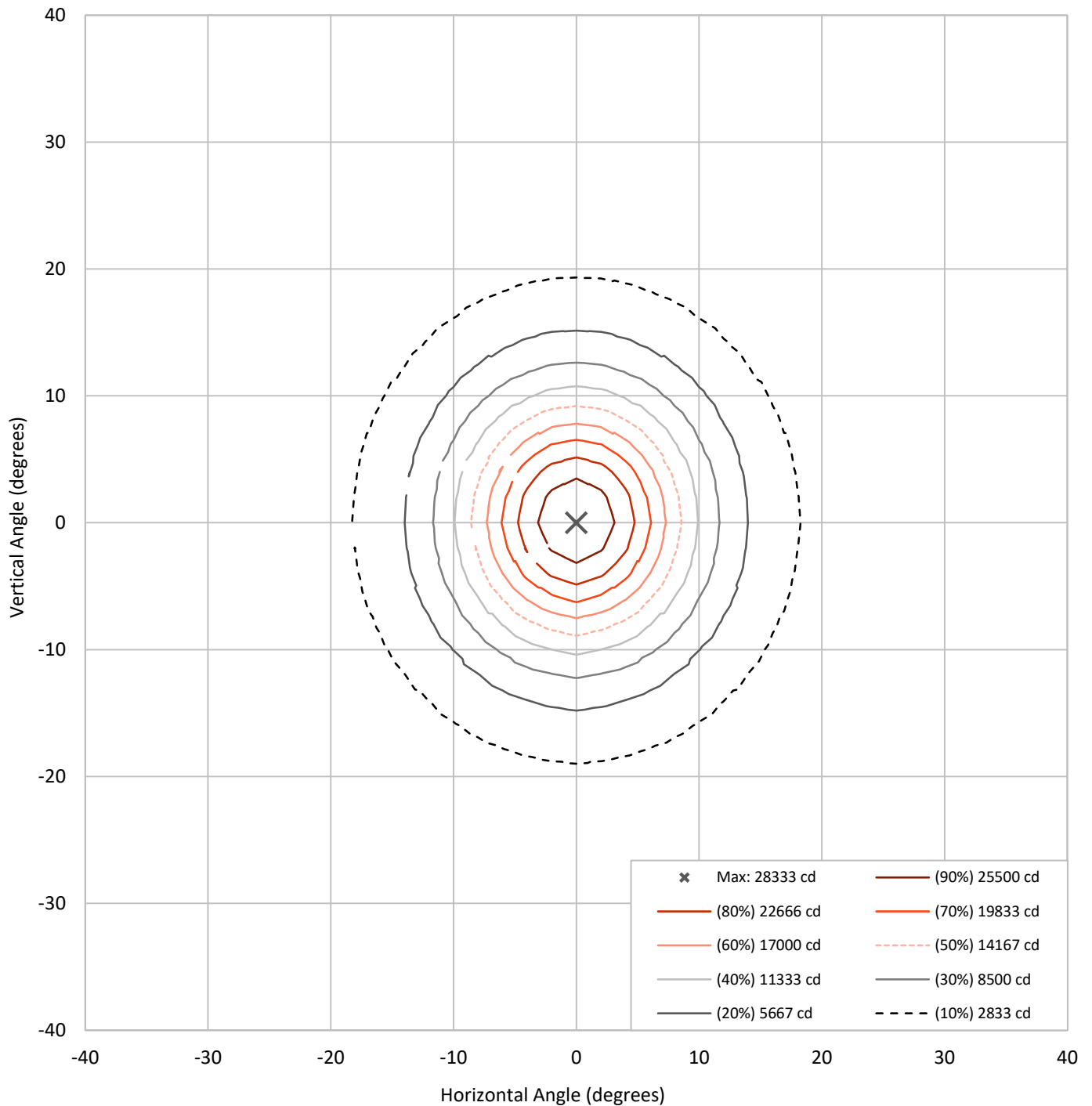
Input Watts (W): 45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P95409

CATALOG NUMBER: VFS-K-B40-3-LED-E1-TS-SG

Iso-Candela Plot





REPORT NUMBER: P95409
 CATALOG NUMBER: VFS-K-B40-3-LED-E1-TS-SG

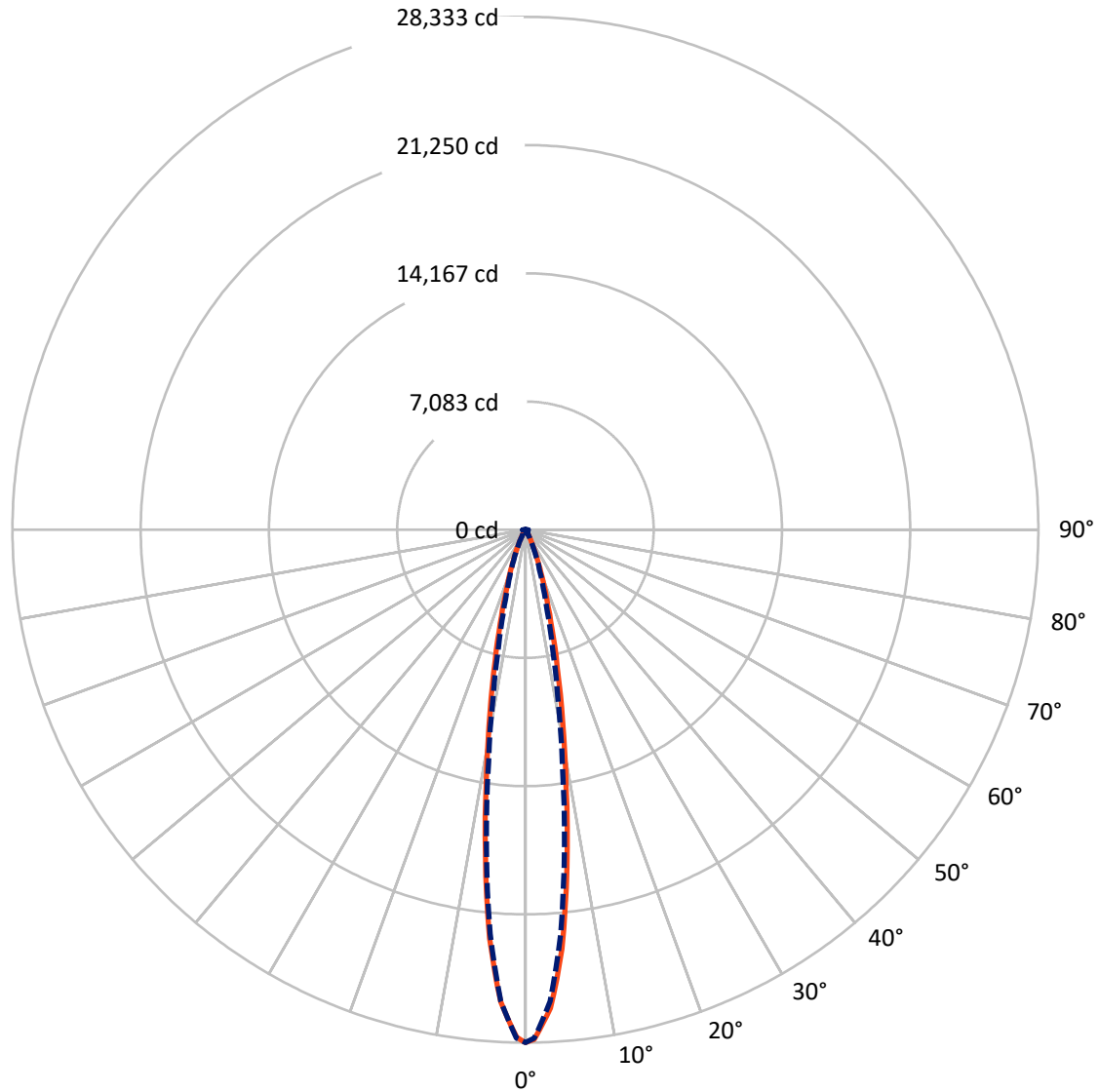
Lumen Table

90	3.1	6.7		6.3		3.8		2.3		3.8		6.3		6.7		3.1			
80	3.1	6.7		6.3		3.8		2.3		3.8		6.3		6.7		3.1			
70	2.8	1.1	0.9	0.7	0.9	1.0	1.1	1.1	1.1	1.1	1.0	0.9	0.7	0.9	1.1	2.8			
60		0.7	0.6	0.7	1.0	1.2	1.4	1.3	1.3	1.4	1.2	1.0	0.7	0.6	0.7				
50	2.0	0.5	0.5	0.7	1.0	1.3	1.6	1.7	1.7	1.6	1.3	1.0	0.7	0.5	0.5	2.0			
40		0.3	0.3	0.7	1.0	1.7	2.9	4.7	4.7	2.9	1.7	1.0	0.7	0.3	0.3				
30	1.4	0.2	0.3	0.7	1.3	3.7	14.1	30.7	30.7	14.1	3.7	1.3	0.7	0.3	0.2	1.4			
20		0.2	0.3	0.8	2.1	12.2	59.7	158.5	158.5	59.7	12.2	2.1	0.8	0.3	0.2				
10	1.4	0.2	0.4	1.0	3.1	24.2	135.7	511.9	511.9	135.7	24.2	3.1	1.0	0.4	0.2	1.4			
0		0.2	0.4	0.9	3.0	23.9	132.4	495.4	495.4	132.4	23.9	3.0	0.9	0.4	0.2				
-10	1.5	0.2	0.3	0.8	2.1	11.8	56.9	147.5	147.5	56.9	11.8	2.1	0.8	0.3	0.2	1.5			
-20		0.3	0.4	0.8	1.4	3.8	13.6	28.9	28.9	13.6	3.8	1.4	0.8	0.4	0.3				
-30	1.8	0.3	0.3	0.6	0.9	1.5	2.7	4.3	4.3	2.7	1.5	0.9	0.6	0.3	0.3	1.8			
-40		0.4	0.3	0.5	0.7	1.0	1.4	1.4	1.4	1.4	1.0	0.7	0.5	0.3	0.4				
-50	2.8	0.9	0.7	0.8	1.0	1.2	1.3	1.3	1.3	1.3	1.2	1.0	0.8	0.7	0.9	2.8			
-60		1.1	0.9	0.6	0.7	0.9	1.0	0.9	0.9	1.0	0.9	0.7	0.6	0.9	1.1				
-70	3.1	6.8		6.6		3.6		2.1		3.6		6.6		6.8		3.1			
-80		6.8		6.6		3.6		2.1		3.6		6.6		6.8					
-90	3.1	6.8		6.6		3.6		2.1		3.6		6.6		6.8		3.1			
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

REPORT NUMBER: P95409

CATALOG NUMBER: VFS-K-B40-3-LED-E1-TS-SG

Luminous Intensity Polar Plot

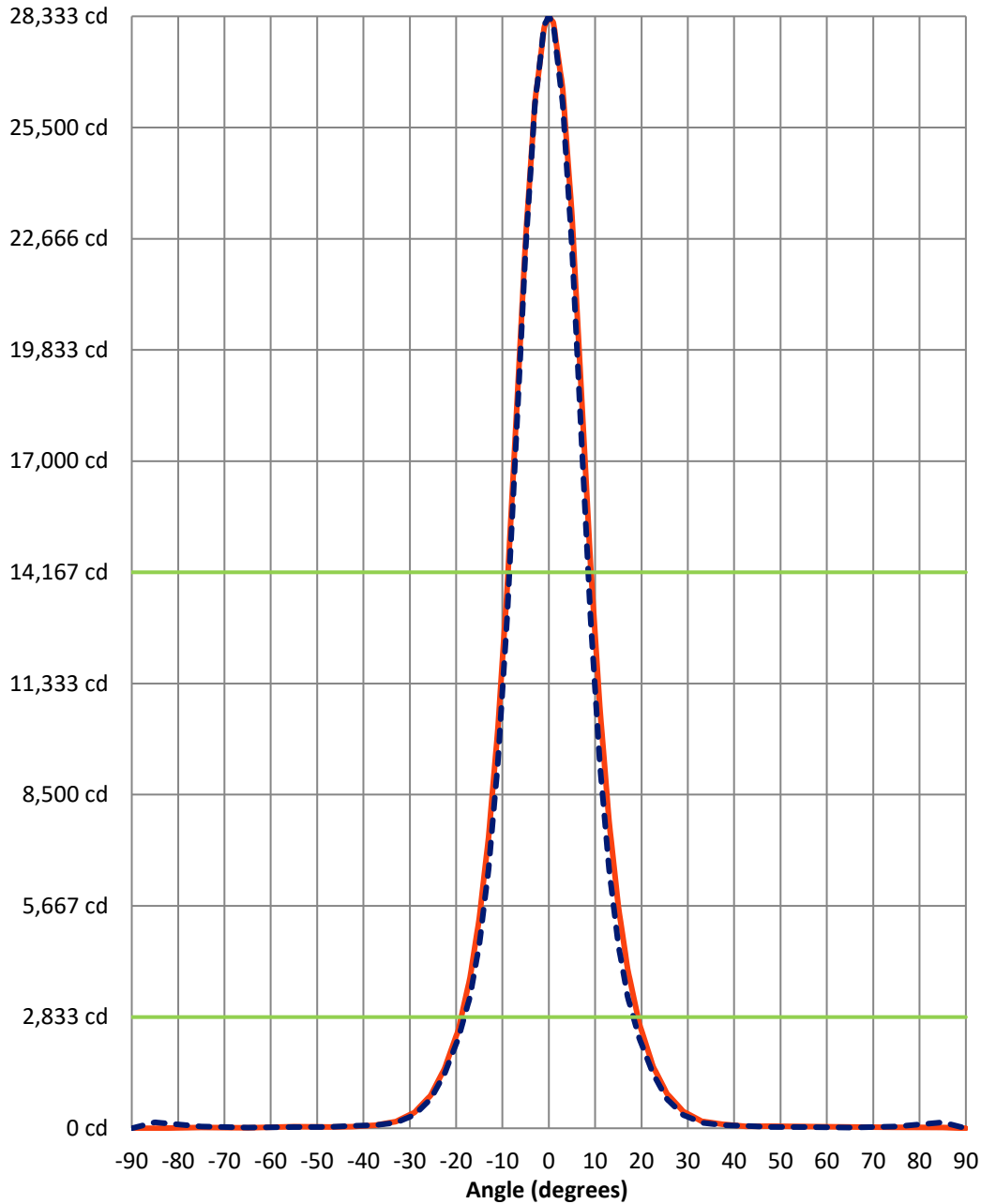


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P95409

CATALOG NUMBER: VFS-K-B40-3-LED-E1-TS-SG

Luminous Intensity Plot



Beam:
 H Angle: 17°
 V Angle: 17.9°
 Lumens: 1525.4
 Efficiency: 38.0%

Field:
 H Angle: 36.5°
 V Angle: 38.1°
 Lumens: 3104
 Efficiency: 77.4%

Spill:
 Lumens: 905.8
 Efficiency: 22.6%

— Vertical Distribution through 0-Deg
 - - Horizontal Distribution through 0-Deg



REPORT NUMBER: P95409

CATALOG NUMBER: VFS-K-B40-3-LED-E1-TS-SG

FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	20	14	18	22	20	16	22	31	37	43	59
75°	24	22	22	20	20	26	28	24	22	26	26
65°	33	39	41	33	31	45	43	31	39	37	39
55°	45	47	37	43	47	43	45	51	47	51	49
47.5°	53	45	51	55	51	43	49	53	59	49	49
42.5°	49	59	67	57	57	57	53	59	57	55	43
37.5°	102	98	108	87	92	92	77	79	79	79	71
33°	179	177	185	175	159	146	126	108	102	90	77
29°	431	435	421	397	366	334	281	240	199	157	124
25.5°	883	889	854	801	726	639	541	454	370	301	222
22.5°	1575	1587	1528	1428	1290	1129	958	775	622	484	340
19.5°	2677	2695	2588	2390	2154	1890	1589	1290	1029	787	547
17°	4064	4089	3894	3572	3147	2714	2272	1867	1489	1139	771
15°	5659	5712	5419	4903	4241	3592	2935	2370	1880	1450	993
13°	7828	7901	7447	6660	5688	4715	3733	2923	2305	1772	1231
11°	10745	10804	10100	8945	7512	6121	4768	3625	2805	2154	1495
9°	14374	14449	13375	11693	9644	7675	5865	4368	3281	2466	1699
7°	18796	18884	17358	14929	12018	9360	6996	5143	3759	2779	1916
5°	23243	23223	21398	18278	14488	10989	8068	5836	4199	3049	2089
3°	26474	26374	24409	20943	16512	12289	8882	6331	4520	3251	2211
1°	28158	27971	25957	22316	17574	12962	9299	6577	4683	3350	2284
0°	28333	28093	26089	22415	17665	13013	9311	6605	4681	3359	2301
-1°	28040	27741	25778	22114	17425	12822	9213	6538	4634	3326	2266
-3°	26132	25768	23917	20434	16123	11935	8686	6215	4437	3212	2185
-5°	22657	22216	20548	17539	13957	10499	7797	5671	4083	2986	2061
-7°	18158	17714	16418	14171	11471	8825	6699	4976	3643	2708	1880
-9°	13739	13410	12541	11003	9113	7171	5551	4172	3155	2394	1672
-11°	10167	9931	9400	8344	7036	5651	4473	3485	2683	2053	1438
-13°	7417	7252	6892	6186	5299	4368	3548	2819	2211	1707	1190
-15°	5358	5338	4986	4549	3961	3340	2793	2258	1784	1385	942
-17°	3841	3755	3599	3324	2952	2549	2166	1770	1398	1088	745
-19.5°	2514	2520	2388	2238	2024	1780	1522	1237	981	765	529
-22.5°	1522	1520	1442	1363	1223	1078	934	763	614	488	350
-25.5°	838	844	789	747	673	586	513	423	346	275	201
-29°	403	413	393	368	344	305	266	218	191	153	114
-33°	171	169	169	157	151	134	116	104	94	90	73
-37.5°	77	81	87	73	85	83	71	65	67	69	71
-42.5°	41	45	45	43	49	47	51	49	53	43	45
-47.5°	33	39	43	47	43	39	41	45	43	39	37
-55°	41	45	47	55	45	47	47	55	47	45	51
-65°	12	14	33	28	33	35	35	33	35	37	28
-75°	20	26	24	33	28	22	33	22	28	35	28
-85°	0	8	16	10	14	6	12	14	24	35	49
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P95409

CATALOG NUMBER: VFS-K-B40-3-LED-E1-TS-SG

CANDELA DISTRIBUTION (continued):

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	73	79	92	118	130	148	153	165	177	183	203
75°	24	16	16	26	26	41	53	85	122	157	189
65°	31	37	39	37	33	26	31	45	79	136	187
55°	47	47	43	41	43	37	33	28	53	114	187
47.5°	49	45	45	47	41	33	28	28	43	100	173
42.5°	49	41	43	39	37	43	31	26	24	81	165
37.5°	71	63	59	53	43	41	37	24	28	81	171
33°	57	51	43	41	28	18	24	8	10	51	151
29°	96	69	55	45	45	31	31	22	10	51	153
25.5°	144	102	73	55	45	31	39	20	16	47	151
22.5°	210	132	79	53	37	24	35	10	4	39	142
19.5°	336	203	118	69	57	39	33	16	12	45	153
17°	460	262	134	81	57	37	28	14	8	41	149
15°	578	328	161	79	53	35	24	12	8	35	140
13°	712	391	183	90	57	31	22	14	6	33	138
11°	897	492	244	128	87	59	53	37	24	55	157
9°	1019	547	248	122	61	41	33	14	10	45	144
7°	1153	610	281	122	75	47	31	24	12	41	148
5°	1255	684	307	136	79	59	37	18	12	41	153
3°	1337	720	321	138	77	53	41	24	14	47	151
1°	1381	745	338	144	77	55	37	24	20	51	153
0°	1389	745	340	142	79	61	33	31	18	45	151
-1°	1377	730	319	140	73	51	28	18	8	43	146
-3°	1320	708	319	142	79	53	35	18	10	43	148
-5°	1237	661	299	128	71	49	33	26	8	33	144
-7°	1125	600	275	118	73	51	28	28	12	35	144
-9°	993	543	252	118	65	49	28	24	12	41	146
-11°	850	468	220	104	69	45	28	24	18	39	146
-13°	700	380	181	90	51	37	20	12	6	37	142
-15°	555	305	155	83	55	39	18	8	8	39	144
-17°	439	256	144	83	65	47	37	18	12	51	153
-19.5°	325	193	108	77	57	39	41	14	22	55	153
-22.5°	230	155	106	85	65	57	45	39	33	73	163
-25.5°	136	94	67	51	39	28	31	18	10	49	146
-29°	92	71	59	41	31	24	26	16	14	51	151
-33°	59	49	47	35	39	24	26	10	14	55	153
-37.5°	59	51	45	41	35	41	31	26	24	69	157
-42.5°	35	41	31	20	26	26	18	14	20	69	153
-47.5°	31	31	24	26	28	26	18	10	33	85	157
-55°	53	45	43	49	43	47	35	39	69	118	185
-65°	28	33	35	26	22	14	31	43	85	134	181
-75°	20	24	26	31	43	51	59	85	128	167	187
-85°	57	71	87	110	130	144	159	167	169	179	187
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P95409

CATALOG NUMBER: VFS-K-B40-3-LED-E1-TS-SG

CANDELA DISTRIBUTION (continued):

	90°
90°	0
85°	0
75°	0
65°	0
55°	0
47.5°	0
42.5°	0
37.5°	0
33°	0
29°	0
25.5°	0
22.5°	0
19.5°	0
17°	0
15°	0
13°	0
11°	0
9°	0
7°	0
5°	0
3°	0
1°	0
0°	0
-1°	0
-3°	0
-5°	0
-7°	0
-9°	0
-11°	0
-13°	0
-15°	0
-17°	0
-19.5°	0
-22.5°	0
-25.5°	0
-29°	0
-33°	0
-37.5°	0
-42.5°	0
-47.5°	0
-55°	0
-65°	0
-75°	0
-85°	0
-90°	0

(END OF REPORT)