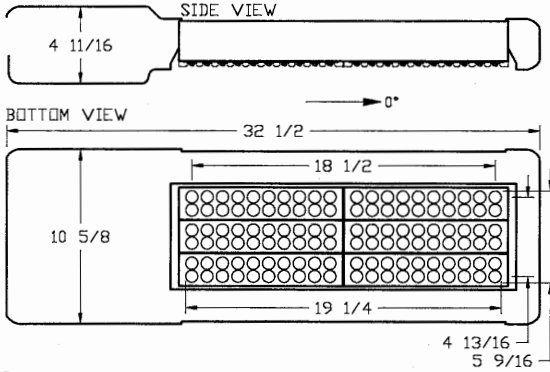


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ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION
Values based on 20 foot mounting height.



REPORT NUMBER: ITL63823
DATE: 12/10/09
PREPARED FOR: BETA LIGHTING, INC.
CATALOG NUMBER: BXSL0212C-U (525mA)
LUMINAIRE: CAST GRAY PAINTED METAL HOUSING WITH CAST GRAY PAINTED METAL ACCESS DOOR, EXTRUDED FINNED METAL HEAT SINK, CAST GRAY PAINTED METAL FORWARD HOUSING PIECE, SIX CIRCUIT BOARDS EACH WITH 20 LEDS AND CAST GRAY PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED.

LAMP: ONE HUNDRED TWENTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.

TOTAL INPUT WATTS = 219.0 AT 240.0 VOLTS

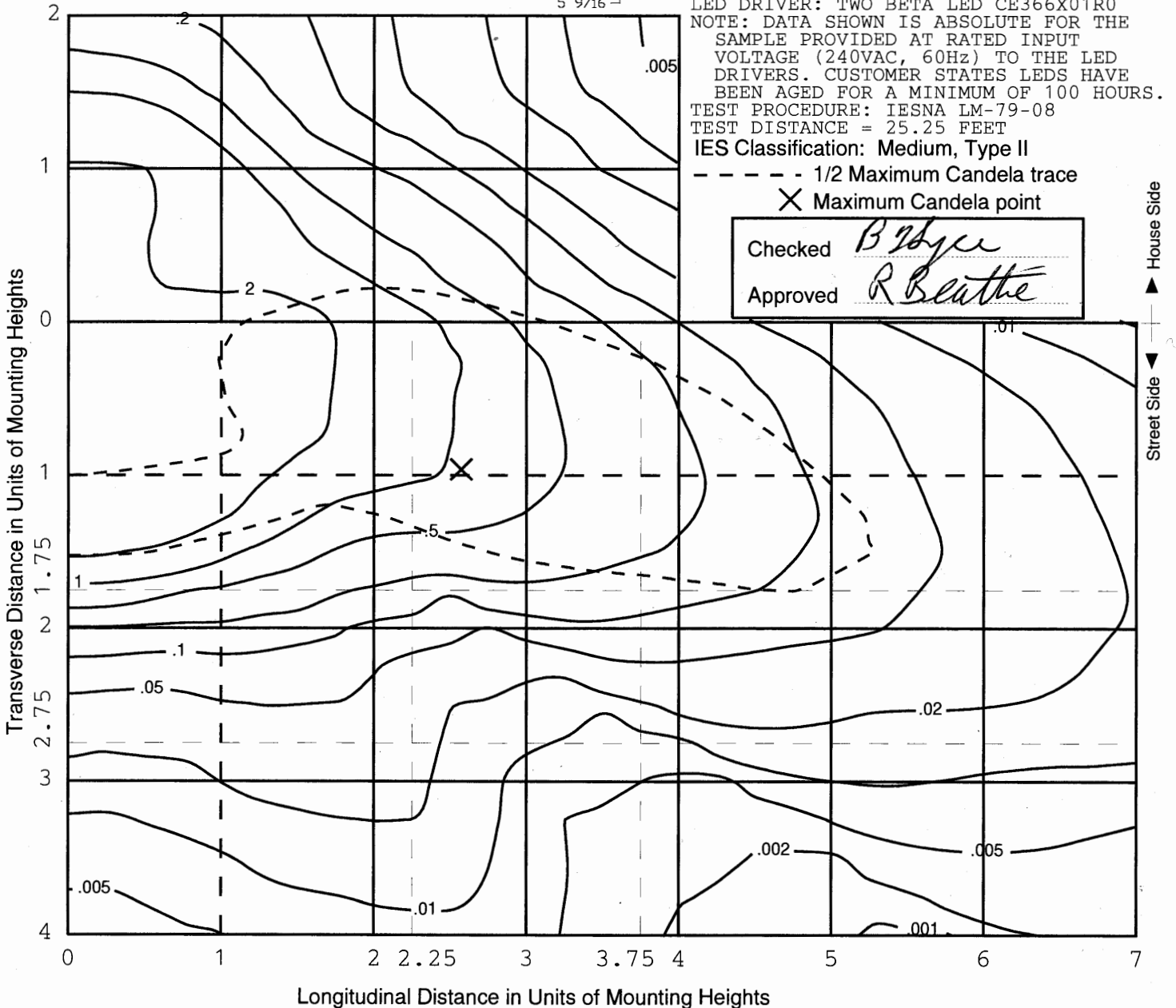
LED DRIVER: TWO BETA LED CE366X01R0
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (240VAC, 60Hz) TO THE LED DRIVERS. CUSTOMER STATES LEDS HAVE BEEN AGED FOR A MINIMUM OF 100 HOURS.

TEST PROCEDURE: IESNA LM-79-08
TEST DISTANCE = 25.25 FEET

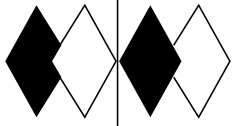
IES Classification: Medium, Type II

--- 1/2 Maximum Candela trace
X Maximum Candela point

Checked *B. Byer*
Approved *R. Beattie*

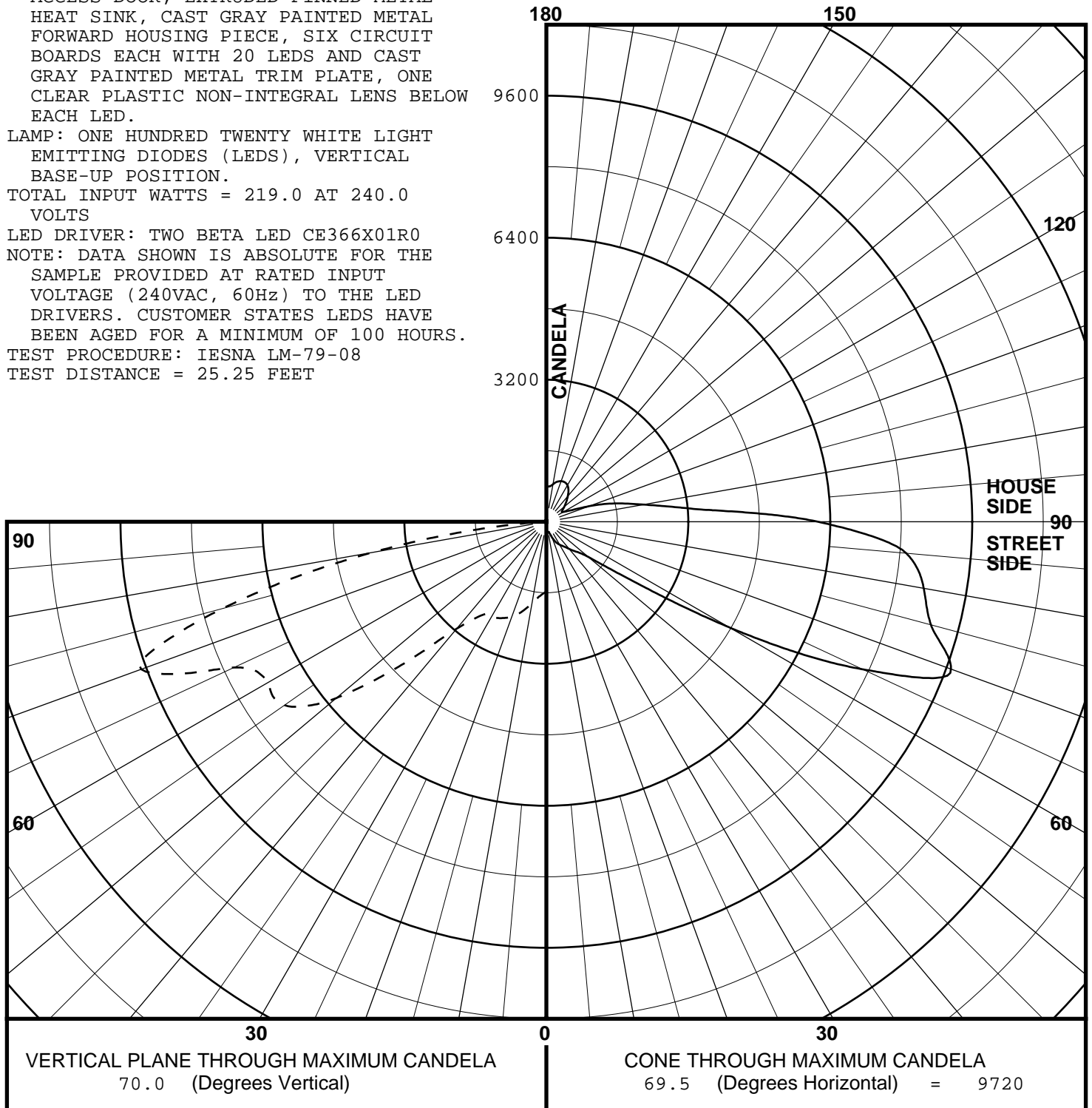


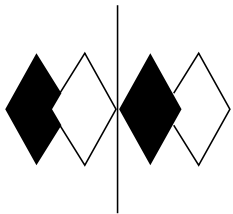
House Side
Street Side



REPORT NUMBER: ITL63823
 DATE: 12/10/09
 PREPARED FOR: BetaLED a Division of Ruud Lighting
 CATALOG NUMBER: BXSL0212C-U(525mA)/STR-LWY-2M-HT-12-C-UL
 LUMINAIRE: CAST GRAY PAINTED METAL HOUSING WITH CAST GRAY PAINTED METAL ACCESS DOOR, EXTRUDED FINNED METAL HEAT SINK, CAST GRAY PAINTED METAL FORWARD HOUSING PIECE, SIX CIRCUIT BOARDS EACH WITH 20 LEDS AND CAST GRAY PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED.
 LAMP: ONE HUNDRED TWENTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.
 TOTAL INPUT WATTS = 219.0 AT 240.0 VOLTS
 LED DRIVER: TWO BETA LED CE366X01R0
 NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (240VAC, 60Hz) TO THE LED DRIVERS. CUSTOMER STATES LEDS HAVE BEEN AGED FOR A MINIMUM OF 100 HOURS.
 TEST PROCEDURE: IESNA LM-79-08
 TEST DISTANCE = 25.25 FEET

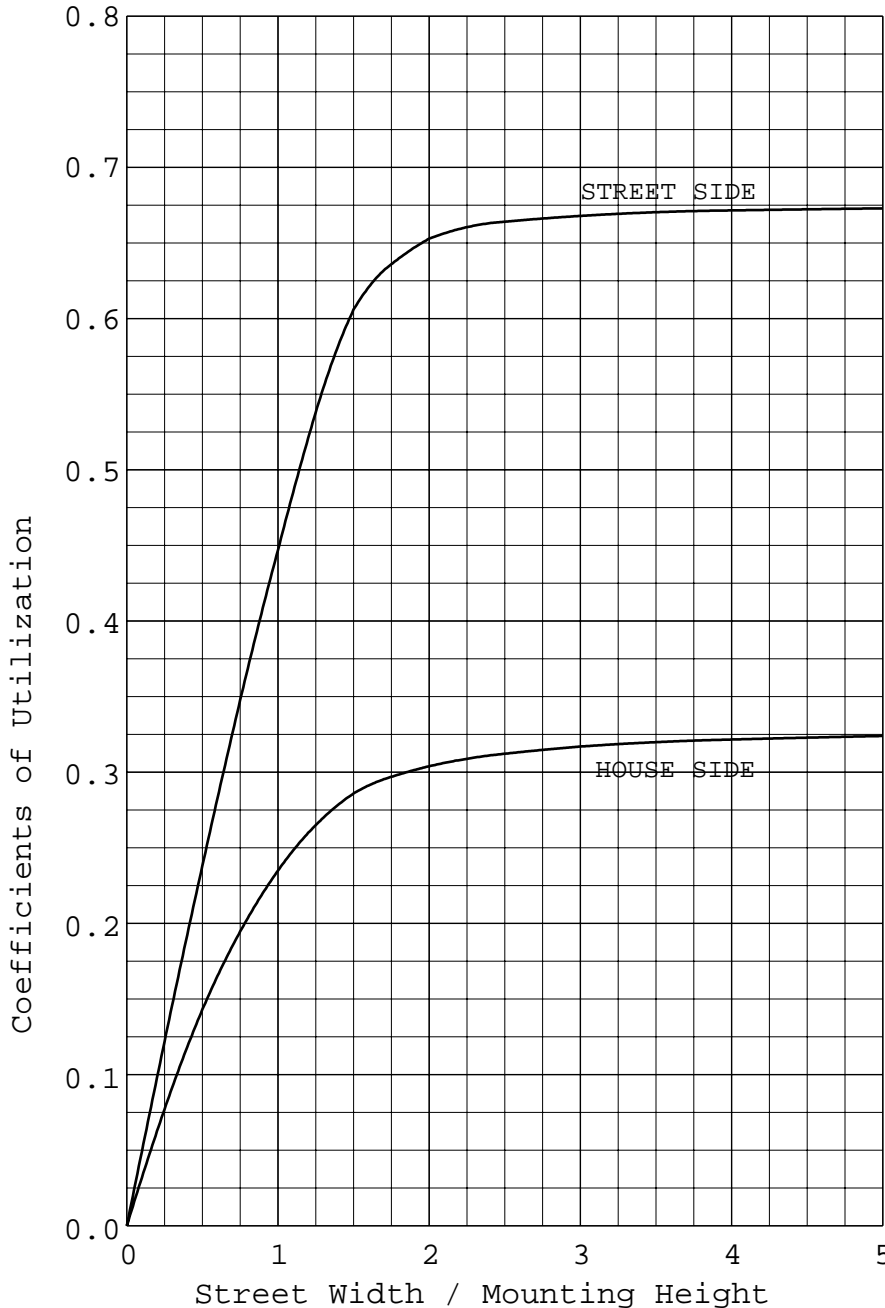
MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





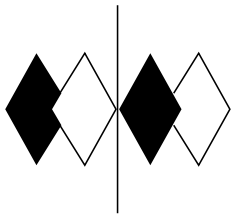
REPORT NUMBER: ITL63823
 DATE: 12/10/09
 PREPARED FOR: BetaLED a Division of Ruud Lighting

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



| | LUMENS | PERCENT OF FIXTURE |
|----------------------|--------|--------------------|
| DOWNWARD STREET SIDE | 9379. | 67.5 |
| DOWNWARD HOUSE SIDE | 4526. | 32.5 |
| DOWNWARD TOTAL | 13905. | 100.0 |
| UPWARD STREET SIDE | 0. | 0.0 |
| UPWARD HOUSE SIDE | 0. | 0.0 |
| UPWARD TOTAL | 0. | 0.0 |
| TOTAL FLUX | 13905. | 100.0 |
| EFFICACY = 63.5 Lm/W | | |

ALL CANDELA AND LUMENS IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.



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REPORT NUMBER: ITL63823

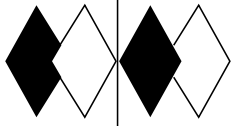
DATE: 12/10/09

PREPARED FOR: BetaLED a Division of Ruud Lighting

FLUX DISTRIBUTION BY SOLID ANGLE

(PER IESNA TM-15-07, LUMINAIRE CLASSIFICATION
SYSTEM FOR OUTDOOR LUMINAIRES)

| | LUMENS | PERCENT OF FIXTURE |
|---------------|--------|--------------------------|
| FORWARD LIGHT | 9379. | 67.5 |
| FL (0- 30) | | 6.5 |
| FM (30- 60) | | 36.6 |
| FH (60- 80) | | 22.9 |
| FVH(80- 90) | | 1.5 |
| BACK LIGHT | 4526. | 32.5 |
| BL (0- 30) | | 4.6 |
| BM (30- 60) | | 19.3 |
| BH (60- 80) | | 8.6 |
| BVH(80- 90) | | 0.1 |
| UPLIGHT | 0. | 0.0 |
| UL (90-100) | | 0.0 |
| UH (100-180) | | 0.0 |
| TRAPPED LIGHT | 0. | 0.0 |
| TOTAL FLUX | 13905. | 100.0 |



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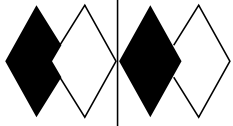
PREPARED FOR: BetaLED a Division of Ruud Lighting

CANDELA TABULATION

| | LATERAL ANGLE | | | | | | | | | | |
|----------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0.0 | 5.0 | 15.0 | 25.0 | 35.0 | 45.0 | 55.0 | 65.0 | 69.5 | 75.0 | 85.0 |
| 180.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 175.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 165.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 155.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 145.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 135.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 125.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 115.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 105.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 95.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 92.5 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 90.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 87.5 | 6. | 6. | 8. | 14. | 17. | 13. | 15. | 59. | 163. | 227. | 120. |
| 85.0 | 16. | 17. | 25. | 53. | 79. | 35. | 43. | 341. | 861. | 1076. | 588. |
| V 82.5 | 45. | 47. | 65. | 122. | 175. | 73. | 88. | 979. | 2275. | 2770. | 1510. |
| E 80.0 | 75. | 75. | 108. | 190. | 295. | 128. | 160. | 1917. | 3979. | 4713. | 2561. |
| R 77.5 | 96. | 96. | 140. | 267. | 456. | 216. | 307. | 3271. | 5830. | 6769. | 4040. |
| T 75.0 | 110. | 111. | 177. | 354. | 592. | 339. | 589. | 5066. | 7566. | 8372. | 5611. |
| I 72.5 | 152. | 152. | 221. | 434. | 639. | 545. | 1154. | 6846. | 9046. | 9169. | 6995. |
| C 70.0<< | 235. | 225. | 263. | 509. | 677. | 954. | 2170. | 7868. | 9720. | 8975. | 8147. |
| A 67.5 | 349. | 341. | 374. | 618. | 887. | 1818. | 3446. | 7783. | 8959. | 7915. | 8697. |
| L 65.0 | 507. | 502. | 533. | 910. | 1664. | 3189. | 4596. | 7565. | 7771. | 6839. | 8198. |
| 62.5 | 1002. | 1023. | 1262. | 2076. | 3261. | 4524. | 5455. | 7331. | 7336. | 6611. | 7116. |
| A 60.0 | 2761. | 2792. | 3146. | 3967. | 4840. | 5604. | 5870. | 7030. | 7249. | 6721. | 6528. |
| N 57.5 | 4609. | 4647. | 4893. | 5411. | 5970. | 6204. | 5554. | 6791. | 7313. | 6825. | 6232. |
| G 55.0 | 5699. | 5728. | 5889. | 6262. | 6485. | 6020. | 4761. | 6531. | 7206. | 6787. | 6039. |
| L 52.5 | 6197. | 6225. | 6320. | 6441. | 6198. | 5163. | 4021. | 6112. | 6821. | 6551. | 5926. |
| E 50.0 | 6097. | 6112. | 6077. | 5917. | 5350. | 4217. | 3498. | 5460. | 6180. | 6128. | 5706. |
| 47.5 | 5523. | 5524. | 5418. | 5097. | 4429. | 3576. | 3126. | 4657. | 5328. | 5460. | 5259. |
| 45.0 | 4866. | 4862. | 4746. | 4386. | 3788. | 3167. | 2843. | 3903. | 4476. | 4739. | 4774. |
| 42.5 | 4304. | 4302. | 4184. | 3860. | 3355. | 2870. | 2630. | 3270. | 3697. | 4021. | 4279. |
| 40.0 | 3855. | 3855. | 3752. | 3454. | 3000. | 2603. | 2427. | 2800. | 3145. | 3510. | 3916. |
| 37.5 | 3437. | 3424. | 3317. | 3030. | 2625. | 2371. | 2321. | 2565. | 2811. | 3174. | 3608. |
| 35.0 | 2991. | 2982. | 2876. | 2628. | 2366. | 2247. | 2311. | 2444. | 2582. | 2891. | 3342. |
| 32.5 | 2600. | 2595. | 2513. | 2364. | 2220. | 2204. | 2337. | 2392. | 2469. | 2740. | 3165. |
| 30.0 | 2339. | 2336. | 2291. | 2209. | 2149. | 2202. | 2380. | 2393. | 2459. | 2714. | 3045. |
| 25.0 | 2081. | 2084. | 2079. | 2077. | 2115. | 2231. | 2385. | 2295. | 2396. | 2578. | 2709. |
| 20.0 | 1968. | 1972. | 1987. | 2026. | 2105. | 2231. | 2228. | 2179. | 2274. | 2346. | 2305. |
| 15.0 | 1861. | 1866. | 1905. | 1978. | 2049. | 2066. | 2003. | 2049. | 2089. | 2089. | 1983. |
| 10.0 | 1885. | 1888. | 1891. | 1871. | 1841. | 1814. | 1826. | 1859. | 1865. | 1846. | 1753. |
| 5.0 | 1650. | 1651. | 1657. | 1666. | 1677. | 1687. | 1693. | 1687. | 1680. | 1662. | 1615. |
| 0.0 | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. |

PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



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DATE: 12/10/09

PREPARED FOR: BetaLED a Division of Ruud Lighting

CANDELA TABULATION

| | HOUSE SIDE | | LATERAL ANGLE | | | | | | | | |
|----------|------------|-------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 90.0 | 95.0 | 105.0 | 115.0 | 125.0 | 135.0 | 145.0 | 155.0 | 165.0 | 175.0 | 180.0 |
| 180.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 175.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 165.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 155.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 145.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 135.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 125.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 115.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 105.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 95.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 92.5 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 90.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 87.5 | 33. | 17. | 13. | 10. | 6. | 5. | 5. | 2. | 1. | 0. | 0. |
| 85.0 | 175. | 42. | 31. | 19. | 15. | 10. | 7. | 6. | 4. | 3. | 3. |
| V 82.5 | 535. | 110. | 58. | 42. | 39. | 28. | 23. | 19. | 15. | 14. | 15. |
| E 80.0 | 1042. | 259. | 92. | 65. | 68. | 60. | 68. | 98. | 129. | 169. | 177. |
| R 77.5 | 1924. | 567. | 179. | 126. | 162. | 219. | 357. | 535. | 680. | 720. | 716. |
| T 75.0 | 3286. | 1258. | 356. | 200. | 285. | 464. | 684. | 862. | 917. | 822. | 807. |
| I 72.5 | 4754. | 2252. | 870. | 312. | 356. | 578. | 842. | 945. | 931. | 806. | 786. |
| C 70.0<< | 6124. | 3330. | 1593. | 613. | 433. | 634. | 868. | 982. | 933. | 800. | 783. |
| A 67.5 | 7190. | 4380. | 2232. | 1074. | 527. | 683. | 878. | 972. | 921. | 836. | 823. |
| L 65.0 | 7412. | 4988. | 2524. | 1469. | 688. | 727. | 887. | 985. | 977. | 925. | 909. |
| 62.5 | 6860. | 5159. | 2714. | 1887. | 1054. | 906. | 1048. | 1164. | 1222. | 1244. | 1242. |
| A 60.0 | 6248. | 5089. | 2949. | 2407. | 1763. | 1521. | 1595. | 1663. | 1727. | 1786. | 1794. |
| N 57.5 | 5802. | 4802. | 3065. | 2853. | 2477. | 2260. | 2226. | 2238. | 2256. | 2239. | 2230. |
| G 55.0 | 5523. | 4478. | 2827. | 2886. | 2757. | 2667. | 2667. | 2675. | 2600. | 2499. | 2487. |
| L 52.5 | 5332. | 4175. | 2420. | 2593. | 2657. | 2739. | 2883. | 2898. | 2761. | 2615. | 2595. |
| E 50.0 | 5055. | 3894. | 2025. | 2215. | 2405. | 2590. | 2834. | 2866. | 2712. | 2582. | 2568. |
| 47.5 | 4671. | 3604. | 1723. | 1875. | 2124. | 2357. | 2587. | 2671. | 2567. | 2474. | 2464. |
| 45.0 | 4292. | 3366. | 1504. | 1609. | 1867. | 2106. | 2285. | 2379. | 2405. | 2366. | 2357. |
| 42.5 | 3950. | 3181. | 1365. | 1400. | 1637. | 1864. | 2034. | 2124. | 2207. | 2255. | 2258. |
| 40.0 | 3695. | 3076. | 1337. | 1261. | 1468. | 1684. | 1864. | 1982. | 2069. | 2138. | 2153. |
| 37.5 | 3458. | 2983. | 1446. | 1183. | 1365. | 1569. | 1756. | 1889. | 1983. | 2049. | 2068. |
| 35.0 | 3261. | 2928. | 1627. | 1171. | 1293. | 1490. | 1670. | 1804. | 1894. | 1949. | 1961. |
| 32.5 | 3131. | 2885. | 1805. | 1240. | 1242. | 1414. | 1582. | 1713. | 1796. | 1840. | 1850. |
| 30.0 | 3017. | 2817. | 1961. | 1351. | 1242. | 1337. | 1482. | 1608. | 1688. | 1730. | 1739. |
| 25.0 | 2696. | 2603. | 2106. | 1583. | 1347. | 1257. | 1284. | 1359. | 1422. | 1455. | 1462. |
| 20.0 | 2268. | 2223. | 2002. | 1660. | 1416. | 1315. | 1255. | 1221. | 1216. | 1224. | 1224. |
| 15.0 | 1916. | 1858. | 1723. | 1567. | 1396. | 1260. | 1190. | 1153. | 1131. | 1123. | 1122. |
| 10.0 | 1696. | 1640. | 1522. | 1411. | 1308. | 1217. | 1146. | 1097. | 1064. | 1046. | 1042. |
| 5.0 | 1589. | 1563. | 1494. | 1426. | 1364. | 1306. | 1258. | 1221. | 1195. | 1178. | 1174. |
| 0.0 | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. | 1566. |

CONE OF MAXIMUM CANDELA