

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: LUMARK

Report Number: P272339

Luminaire Tested: **CTKR2-B3-D-UNV-T2**

Issue Date: 9/28/2018

Test Information

Test Method: LM-79-08
Report Number: P272339
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-939-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 9/28/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: CTKR2-B3-D-UNV-T2
Description: CARETAKER AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K LED WITH TYPE II OPTIC AND U0 SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9159 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Luminous Opening: Circular (Dia: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

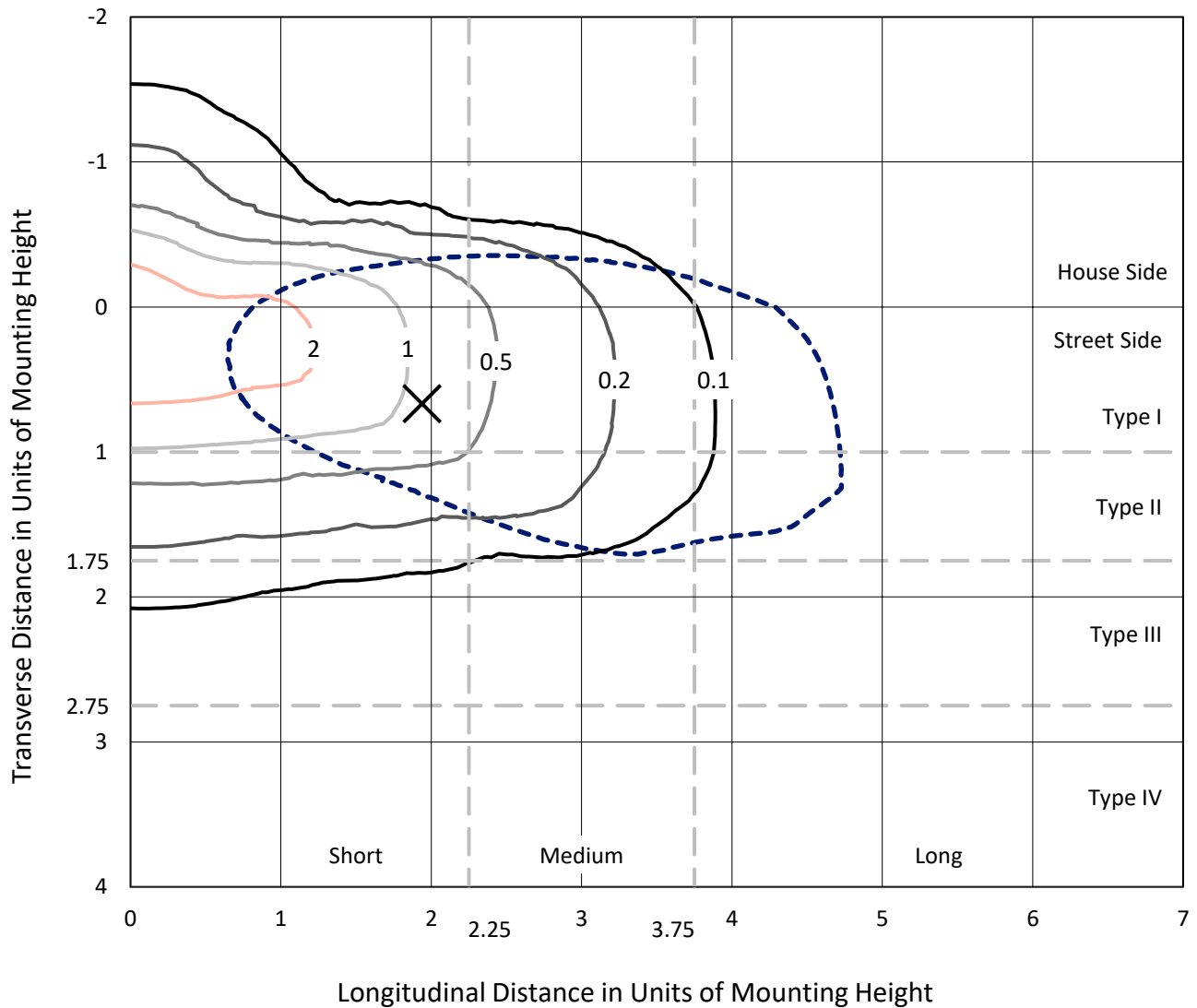
Input Watts (W): 70.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

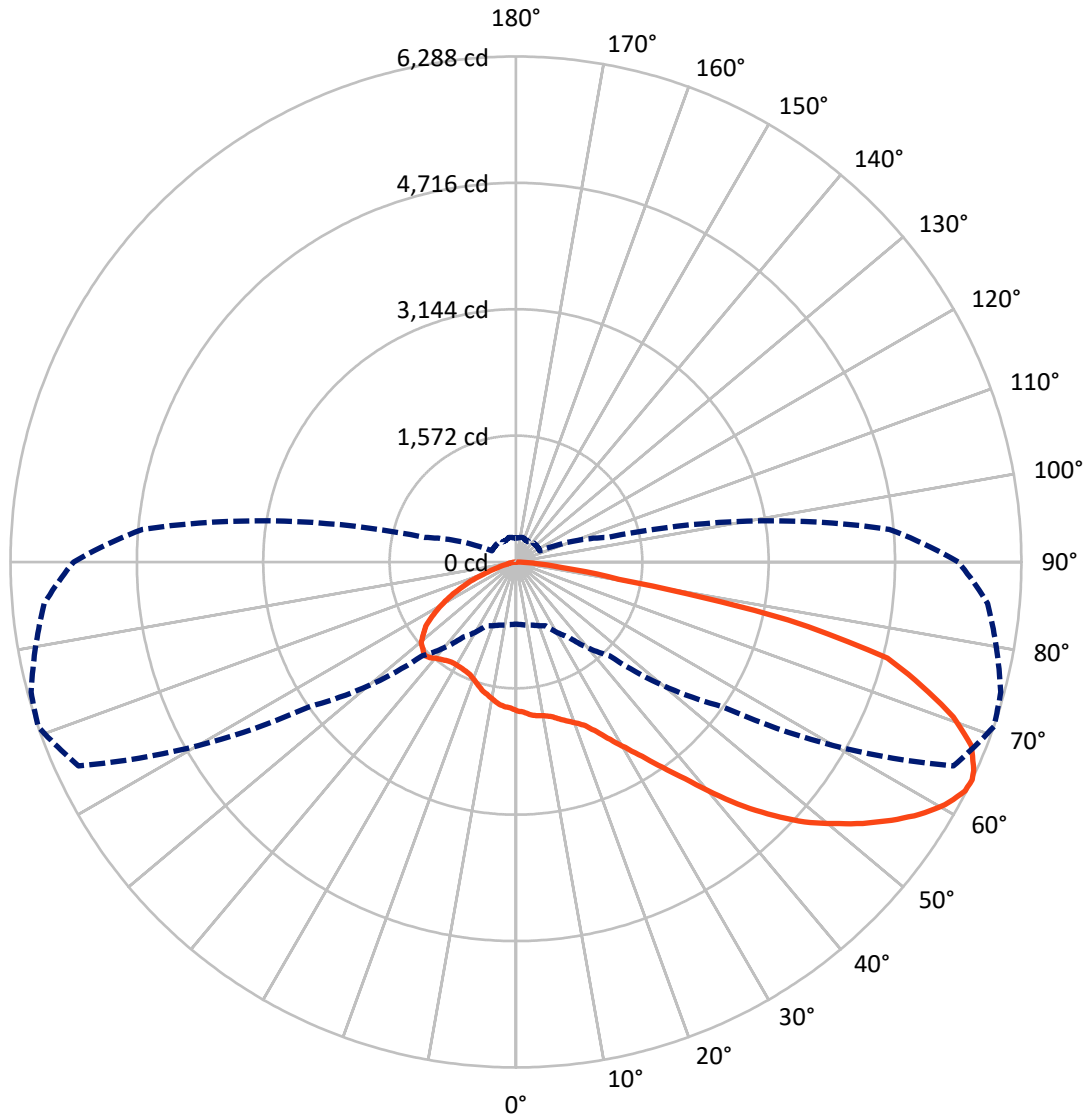
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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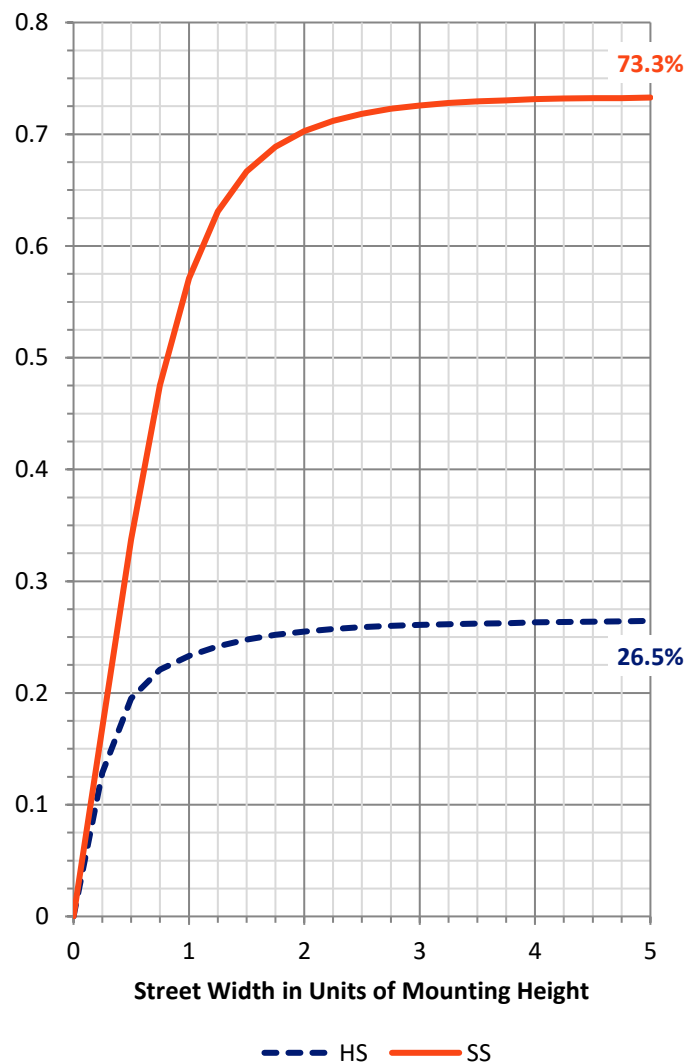
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2455.4	0.0	2455.4
	% Fixture	26.8	0.0	26.8
Street Side	Lumens	6703.6	0.0	6703.6
	% Fixture	73.2	0.0	73.2
Total	Lumens	9159.0	0.0	9159.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.5	1.9
10°-20°	519.3	5.7
20°-30°	832.3	9.1
30°-40°	1155.6	12.6
40°-50°	1539.5	16.8
50°-60°	1825.6	19.9
60°-70°	1848.7	20.2
70°-80°	1128.9	12.3
80°-90°	131.7	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	9159.0	100.0
0°-180°	9159.0	100.0

Coefficient of Utilization



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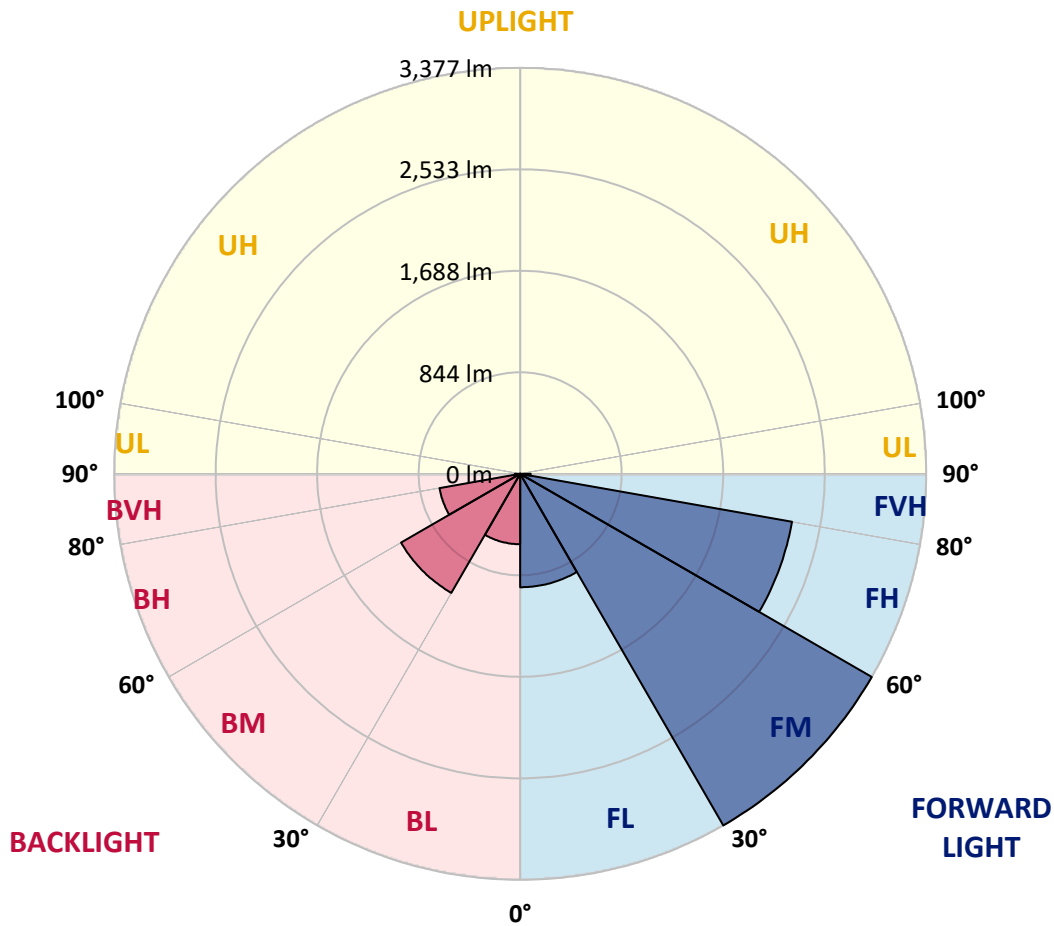
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	943.4	10.3			
FM (30°-60°)	3376.9	36.9			
FH (60°-80°)	2295.9	25.1			G2/5000
FVH (80°-90°)	87.5	1.0			G1/100
BL (0°-30°)	585.7	6.4	B2/1000		
BM (30°-60°)	1143.8	12.5	B2/2500		
BH (60°-80°)	681.6	7.4	B2/1000		G2/1000
BVH (80°-90°)	44.2	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1
2.5°	1929.2	1924.9	1922.8	1918.5	1911.0	1904.6	1896.0	1878.9	1871.4	1859.7	1842.5
5°	2018.0	2014.8	2010.5	2002.0	1991.3	1968.8	1948.5	1923.9	1910.0	1895.0	1861.8
7.5°	2086.5	2083.3	2080.1	2074.7	2060.8	2034.1	1995.6	1954.9	1932.4	1912.1	1868.2
10°	2142.2	2140.0	2133.6	2124.0	2102.6	2071.5	2030.9	1978.4	1944.2	1918.5	1856.5
12.5°	2211.7	2210.6	2195.7	2178.5	2155.0	2124.0	2073.7	2019.1	1974.2	1939.9	1856.5
15°	2271.6	2268.4	2255.6	2237.4	2212.8	2183.9	2134.7	2070.5	2026.6	1981.6	1877.9
17.5°	2295.2	2292.0	2282.3	2269.5	2258.8	2232.0	2191.4	2128.2	2081.2	2033.0	1907.8
20°	2315.5	2310.1	2306.9	2306.9	2300.5	2280.2	2245.9	2193.5	2137.9	2082.2	1942.1
22.5°	2296.2	2304.8	2333.7	2356.2	2359.4	2348.7	2327.3	2277.0	2210.6	2158.2	1996.6
25°	2302.7	2303.7	2360.4	2411.8	2427.8	2434.3	2423.6	2393.6	2339.0	2290.9	2089.7
27.5°	2301.6	2312.3	2355.1	2418.2	2482.4	2512.4	2533.8	2534.8	2500.6	2454.6	2219.2
30°	2267.3	2274.8	2328.3	2417.1	2522.0	2595.8	2641.8	2702.8	2678.2	2629.0	2382.9
32.5°	2199.9	2198.9	2264.1	2399.0	2560.5	2688.9	2774.5	2878.3	2882.6	2839.8	2581.9
35°	2094.0	2097.2	2183.9	2346.5	2569.1	2773.5	2904.0	3091.2	3136.2	3127.6	2866.5
37.5°	1990.2	1993.4	2091.9	2280.2	2563.7	2841.9	3034.5	3310.6	3419.7	3472.2	3222.9
40°	1880.0	1889.6	1989.1	2193.5	2528.4	2884.7	3175.8	3555.6	3785.7	3862.7	3583.4
42.5°	1759.1	1770.9	1897.1	2112.2	2471.7	2904.0	3304.2	3867.0	4157.0	4209.4	3887.3
45°	1662.8	1667.1	1760.2	1959.2	2380.8	2919.0	3433.6	4240.4	4501.5	4556.1	4175.2
47.5°	1568.6	1571.8	1647.8	1826.5	2257.7	2902.9	3567.4	4540.0	4833.2	4857.8	4433.0
50°	1193.1	1203.8	1500.1	1707.7	2098.3	2849.4	3695.8	4872.8	5115.7	5131.7	4675.9
52.5°	1061.4	1073.2	1154.5	1583.6	1931.4	2732.8	3791.0	5214.1	5404.6	5378.9	4930.6
55°	993.0	1002.6	1045.4	1273.3	1777.3	2533.8	3841.3	5527.6	5672.1	5621.8	5166.0
57.5°	935.2	944.8	980.1	1082.8	1602.9	2244.9	3811.4	5800.5	5925.7	5846.5	5412.1
60°	868.8	876.3	920.2	986.5	1404.9	1972.0	3647.6	6016.6	6134.3	6055.2	5642.1
62.5°	811.1	821.8	851.7	909.5	1219.8	1756.9	3317.0	6085.1	6273.4	6215.7	5826.2
64°	772.5	782.2	813.2	874.2	1140.6	1649.9	3136.2	6003.8	6288.4	6244.6	5890.4
65°	743.7	752.2	787.5	843.2	1076.4	1595.4	2986.4	5922.5	6258.5	6246.7	5904.3
67.5°	668.8	674.1	711.6	755.4	926.6	1442.4	2558.4	5818.7	6111.9	6087.3	5802.6
70°	587.4	587.4	618.5	663.4	785.4	1257.3	2125.0	5448.5	5773.7	5687.1	5436.7
72.5°	485.8	483.6	509.3	566.0	653.8	1059.3	1635.0	4824.7	5283.7	5296.5	4896.3
75°	276.1	272.9	293.2	386.3	482.6	848.5	1136.3	3722.5	4774.4	4817.2	4222.2
77.5°	40.7	41.7	51.4	79.2	120.9	368.1	463.3	1843.6	3462.5	3845.6	3281.7
80°	33.2	33.2	40.7	62.1	87.7	215.1	155.2	680.5	1297.9	1985.9	1923.9
82.5°	15.0	16.1	26.8	40.7	56.7	48.2	59.9	343.5	596.0	766.1	949.1
85°	9.6	9.6	15.0	20.3	22.5	17.1	13.9	138.0	263.2	346.7	376.6
87.5°	5.4	5.4	6.4	6.4	5.4	4.3	4.3	3.2	4.3	7.5	15.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1	1851.1
2.5°	1837.2	1828.6	1819.0	1815.8	1811.5	1805.1	1796.5	1790.1	1785.8	1785.8	1785.8
5°	1850.0	1835.1	1813.7	1791.2	1769.8	1754.8	1745.2	1733.4	1734.5	1732.3	1734.5
7.5°	1851.1	1831.8	1794.4	1755.9	1727.0	1703.4	1684.2	1673.5	1668.1	1675.6	1677.8
10°	1831.8	1806.2	1747.3	1714.1	1663.9	1629.6	1605.0	1591.1	1598.6	1608.2	1608.2
12.5°	1823.3	1788.0	1716.3	1652.1	1614.6	1559.0	1532.2	1515.1	1530.1	1532.2	1531.2
15°	1829.7	1780.5	1687.4	1603.9	1534.4	1502.3	1448.8	1431.7	1461.6	1469.1	1471.3
17.5°	1838.3	1775.1	1648.9	1534.4	1452.0	1408.1	1349.3	1325.7	1356.8	1384.6	1385.7
20°	1852.2	1768.7	1614.6	1465.9	1352.5	1297.9	1245.5	1225.2	1240.1	1281.9	1284.0
22.5°	1897.1	1778.3	1584.7	1410.3	1274.4	1195.2	1148.1	1113.9	1119.2	1162.0	1165.2
25°	1974.2	1826.5	1578.3	1370.7	1199.5	1096.8	1056.1	1009.0	1002.6	1035.8	1041.1
27.5°	2078.0	1900.3	1590.0	1324.7	1128.9	1000.5	952.3	895.6	876.3	900.9	908.4
30°	2210.6	1999.8	1609.3	1281.9	1048.6	889.2	815.3	774.7	758.6	774.7	779.0
32.5°	2373.3	2120.8	1635.0	1242.3	956.6	755.4	673.0	660.2	636.7	644.1	651.6
35°	2631.1	2294.1	1692.7	1194.1	857.1	635.6	576.7	554.3	533.9	538.2	547.8
37.5°	2932.9	2539.1	1769.8	1150.3	745.8	558.5	489.0	470.8	468.7	471.9	478.3
40°	3281.7	2827.0	1862.9	1089.3	633.4	491.1	405.5	409.8	428.0	432.3	443.0
42.5°	3544.9	3126.6	1991.3	1015.4	543.6	420.5	352.0	383.1	423.7	431.2	445.1
45°	3818.8	3320.2	2104.7	913.8	478.3	355.2	338.1	380.9	423.7	435.5	444.1
47.5°	4063.9	3561.0	2116.5	780.0	409.8	329.6	339.2	376.6	419.4	424.8	426.9
50°	4273.6	3796.4	2168.9	619.5	375.6	330.6	343.5	369.2	408.7	412.0	407.7
52.5°	4539.0	4038.2	2114.3	481.5	354.2	337.1	352.0	360.6	399.1	398.0	400.2
55°	4797.9	4249.0	2015.9	422.7	342.4	341.3	359.5	356.3	386.3	391.6	395.9
57.5°	5053.6	4433.0	1806.2	398.0	341.3	343.5	352.0	349.9	385.2	385.2	378.8
60°	5266.6	4575.3	1576.1	382.0	342.4	343.5	336.0	338.1	369.2	374.5	373.4
62.5°	5431.3	4664.2	1338.6	351.0	336.0	332.8	312.4	313.5	336.0	328.5	323.1
64°	5504.1	4663.1	1181.3	328.5	326.4	325.3	299.6	296.4	317.8	301.7	298.5
65°	5527.6	4626.7	1086.1	313.5	311.4	317.8	290.0	285.7	305.0	286.8	284.6
67.5°	5361.8	4367.8	825.0	284.6	271.8	283.6	264.3	255.7	262.2	247.2	245.0
70°	4917.7	3895.9	555.3	245.0	237.5	252.5	244.0	231.1	214.0	202.2	203.3
72.5°	4320.7	3380.1	328.5	195.8	201.2	226.8	222.6	201.2	177.6	162.6	161.6
75°	3732.2	2770.2	205.4	129.5	133.8	179.8	183.0	166.9	154.1	158.4	166.9
77.5°	2935.0	2002.0	134.8	64.2	59.9	103.8	114.5	100.6	134.8	209.7	205.4
80°	1653.2	1212.3	107.0	39.6	39.6	56.7	83.5	92.0	188.3	135.9	128.4
82.5°	832.5	586.4	59.9	25.7	24.6	31.0	48.2	150.9	128.4	87.7	84.5
85°	321.0	175.5	18.2	15.0	15.0	18.2	25.7	145.5	82.4	64.2	63.1
87.5°	11.8	4.3	5.4	6.4	7.5	7.5	8.6	16.1	18.2	20.3	19.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)