

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: P233475

Luminaire Tested: **VRDN-C02-D-UNV-T2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-10)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: VRDN-CO2-D-UNV-T2-7030
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1140mA LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10719 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

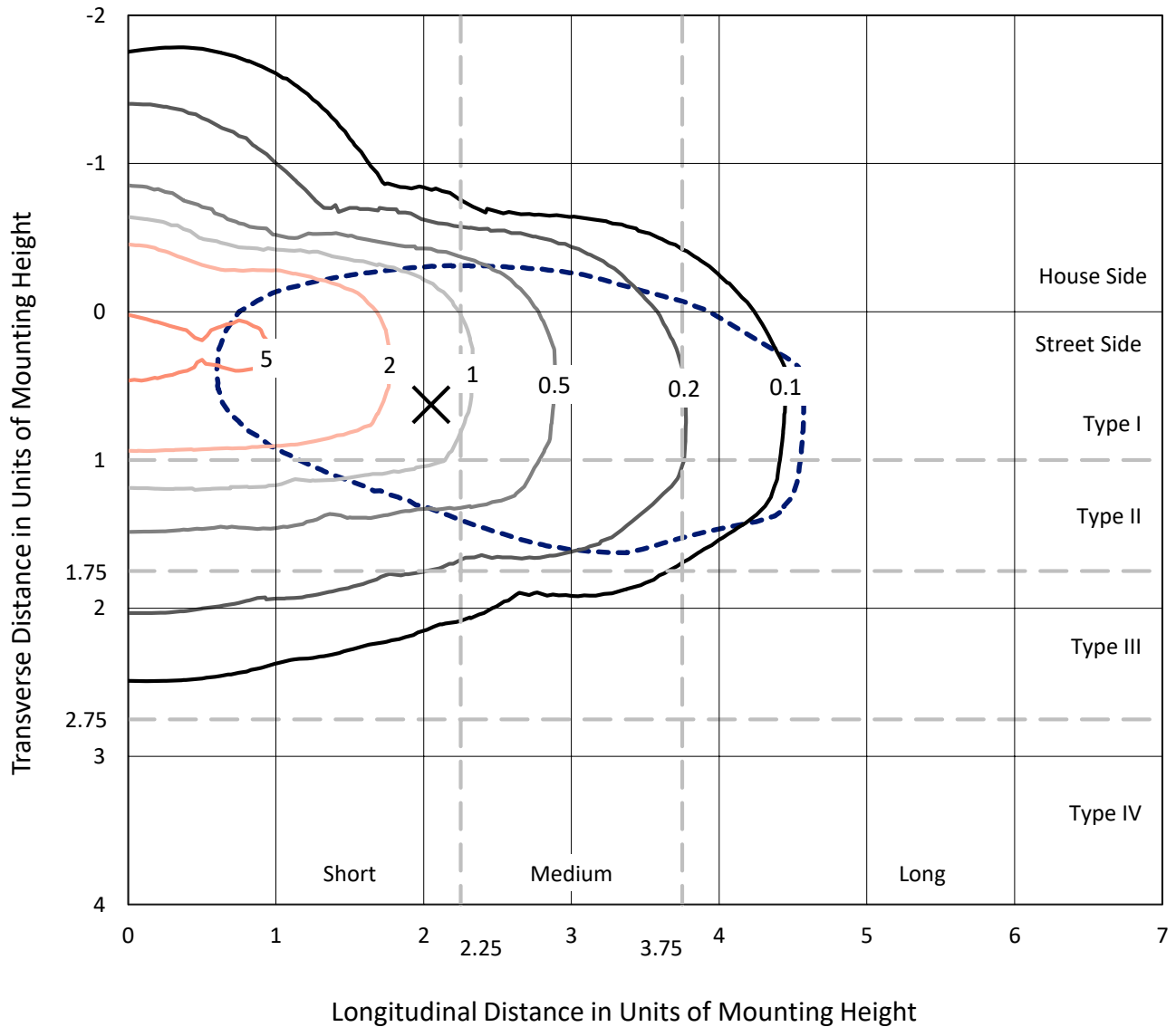
Input Watts (W): 90
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P233475
 CATALOG NUMBER: VRDN-C02-D-UNV-T2-7030

Iso-Footcandle Lines of Horizontal Illumination

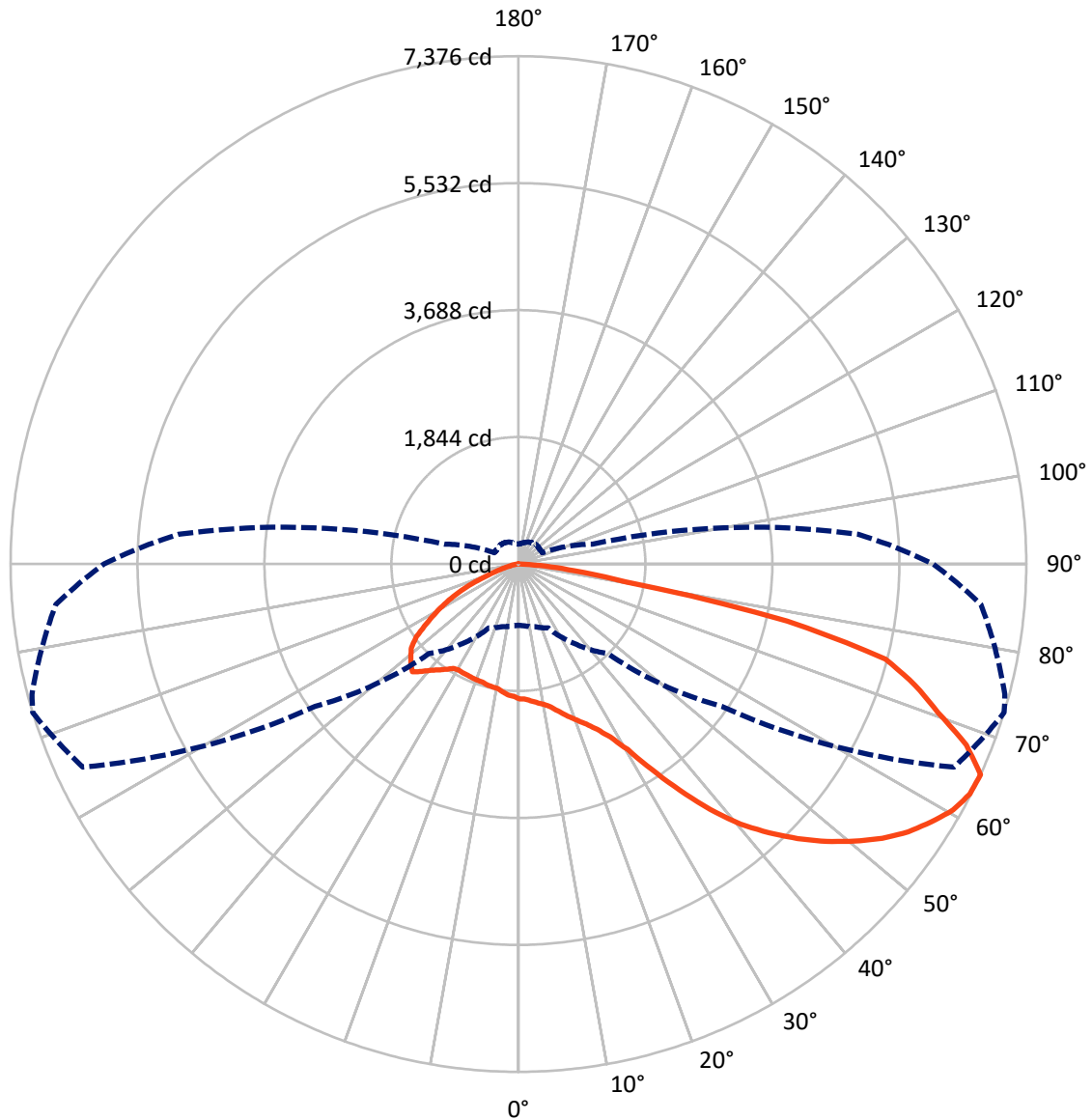
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P233475
CATALOG NUMBER: VRDN-C02-D-UNV-T2-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P233475

CATALOG NUMBER: VRDN-C02-D-UNV-T2-7030

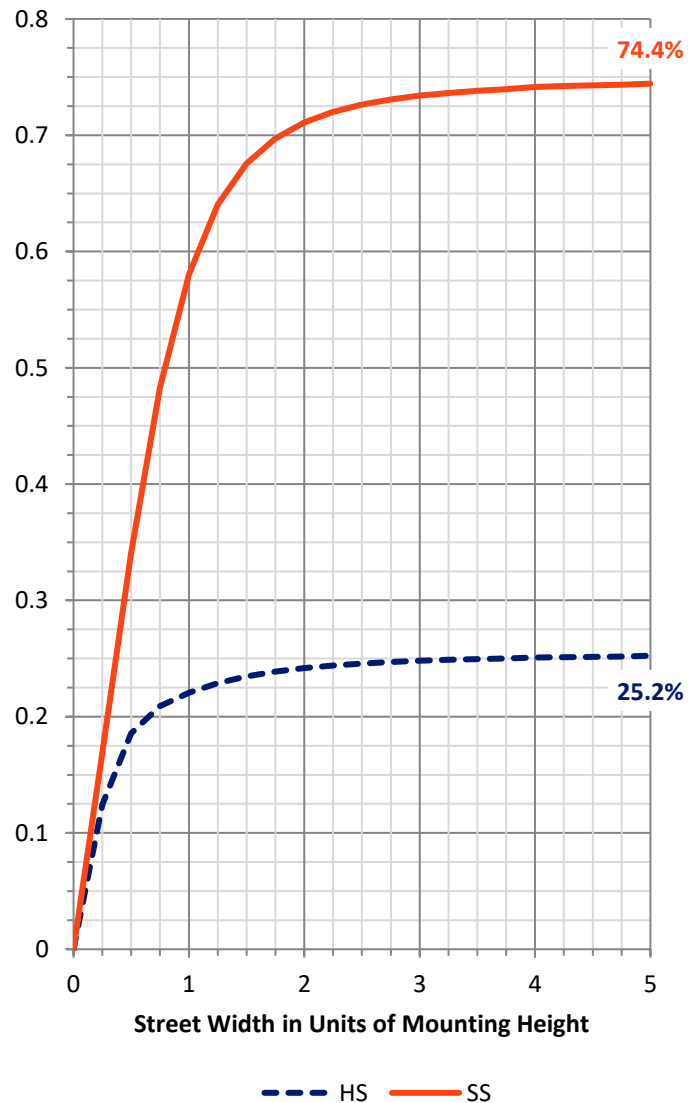
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2747.8	0.0	2747.8
	% Fixture	25.6	0.0	25.6
Street Side	Lumens	7971.2	0.0	7971.2
	% Fixture	74.4	0.0	74.4
Total	Lumens	10719.0	0.0	10719.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.0	1.7
10°-20°	565.5	5.3
20°-30°	948.6	8.8
30°-40°	1391.1	13.0
40°-50°	1880.1	17.5
50°-60°	2178.0	20.3
60°-70°	2127.5	19.8
70°-80°	1277.6	11.9
80°-90°	163.6	1.5
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°	10719.0	100.0
0°-180°	10719.0	100.0



REPORT NUMBER: P233475

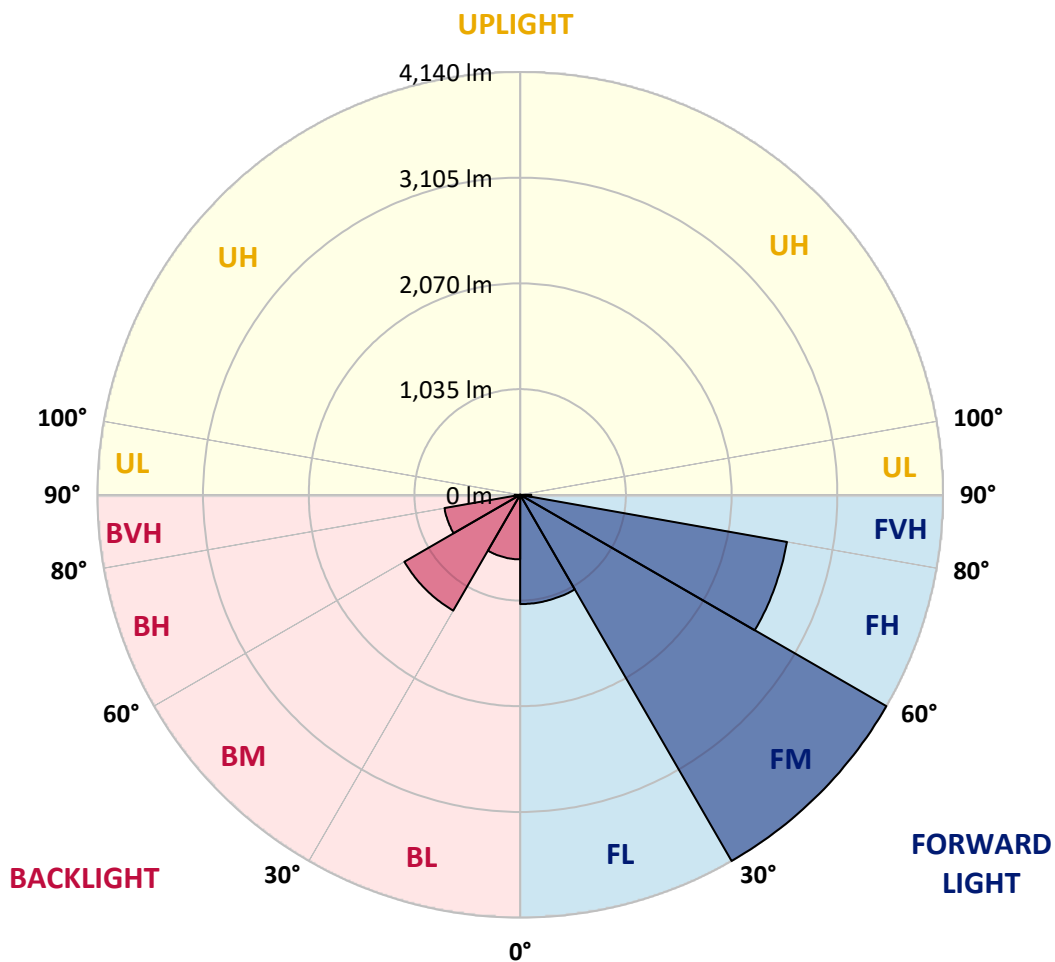
CATALOG NUMBER: VRDN-C02-D-UNV-T2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1069.6	10.0			
FM (30°-60°)	4140.0	38.6			
FH (60°-80°)	2652.7	24.7			G2/5000
FVH (80°-90°)	108.9	1.0			G2/225
BL (0°-30°)	631.6	5.9	B2/1000		
BM (30°-60°)	1309.2	12.2	B2/2500		
BH (60°-80°)	752.3	7.0	B2/1000		G2/1000
BVH (80°-90°)	54.7	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





REPORT NUMBER: P233475

CATALOG NUMBER: VRDN-C02-D-UNV-T2-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0
2.5°	2080.6	2088.4	2079.7	2054.4	2041.7	2032.9	2006.7	1983.3	1964.8	1962.9	1945.4
5°	2160.4	2172.1	2157.5	2125.4	2112.7	2094.3	2065.1	2032.9	1999.9	1993.0	1958.0
7.5°	2261.6	2263.6	2255.8	2223.7	2197.4	2158.5	2107.9	2073.8	2035.9	2025.2	1969.7
10°	2347.3	2346.3	2336.6	2305.4	2279.2	2245.1	2174.1	2118.6	2073.8	2060.2	1983.3
12.5°	2429.0	2427.1	2417.4	2385.2	2352.1	2323.9	2270.4	2195.5	2135.1	2117.6	2022.2
15°	2530.2	2525.4	2509.8	2467.0	2440.7	2407.6	2368.7	2293.8	2224.7	2200.3	2078.7
17.5°	2608.1	2607.1	2595.4	2559.4	2528.3	2492.3	2456.3	2397.9	2323.0	2295.7	2134.2
20°	2652.9	2649.0	2646.0	2617.8	2610.0	2590.6	2539.0	2494.2	2419.3	2391.1	2196.4
22.5°	2700.5	2701.5	2702.5	2687.9	2710.3	2693.7	2655.8	2601.3	2525.4	2493.3	2284.0
25°	2711.2	2713.2	2732.7	2764.8	2792.0	2822.2	2794.9	2741.4	2659.7	2625.6	2403.7
27.5°	2681.1	2688.9	2747.3	2801.8	2898.1	2937.0	2932.2	2929.2	2845.5	2811.5	2568.2
30°	2708.3	2708.3	2748.2	2841.7	2963.3	3065.5	3087.9	3150.1	3124.8	3100.5	2844.6
32.5°	2626.6	2641.2	2712.2	2842.6	3035.3	3184.2	3285.4	3458.6	3558.9	3538.4	3235.8
35°	2472.8	2492.3	2596.4	2795.9	3071.3	3324.3	3505.4	3839.2	4032.8	4057.1	3706.8
37.5°	2354.1	2370.6	2501.0	2722.9	3084.9	3455.7	3759.4	4267.3	4517.4	4504.8	4105.8
40°	2209.1	2238.3	2369.7	2636.3	3052.8	3567.6	4034.8	4660.5	4968.0	4909.6	4485.3
42.5°	2078.7	2104.0	2214.0	2498.1	3008.1	3630.9	4283.9	5065.3	5334.9	5288.2	4844.4
45°	1940.5	1962.9	2065.1	2332.7	2903.9	3662.0	4517.4	5452.7	5687.2	5634.6	5177.3
47.5°	1781.9	1812.0	1933.7	2177.0	2751.1	3642.6	4687.8	5789.4	6022.0	5983.0	5452.7
50°	1381.9	1413.0	1731.3	2031.0	2539.0	3561.8	4840.5	6126.1	6324.6	6287.6	5696.0
52.5°	1254.4	1268.0	1367.3	1863.6	2318.1	3402.2	4935.9	6403.5	6619.5	6582.5	5925.6
55°	1176.6	1186.3	1241.8	1522.0	2130.3	3145.3	4947.6	6691.5	6867.7	6819.0	6169.9
57.5°	1096.8	1107.5	1168.8	1312.8	1941.5	2743.4	4824.0	6935.8	7069.1	7016.5	6403.5
60°	1029.6	1035.5	1095.8	1195.1	1728.3	2344.4	4505.8	7102.2	7255.0	7186.9	6632.1
62.5°	968.3	976.1	1019.9	1110.4	1549.3	2045.6	4062.0	7103.2	7357.2	7315.3	6748.0
65°	888.5	900.2	943.0	1024.7	1404.3	1841.2	3602.7	6979.6	7375.6	7313.4	6742.1
67.5°	796.1	810.6	849.6	914.8	1211.6	1623.2	2962.3	6817.0	7014.6	7003.9	6463.8
70°	703.6	703.6	747.4	799.9	1005.3	1389.7	2340.5	6238.0	6463.8	6480.3	5964.6
72.5°	593.6	595.6	629.6	675.4	809.7	1140.6	1705.0	5333.0	6025.9	5825.4	5379.7
75°	498.3	496.3	531.4	569.3	658.8	898.2	1112.3	3918.0	5507.2	5551.9	4734.5
77.5°	264.7	255.0	299.7	329.9	386.3	499.2	617.0	1964.8	3988.0	4075.6	3790.5
80°	74.9	75.9	198.5	221.9	254.0	247.2	286.1	749.3	1577.5	1778.0	2210.1
82.5°	44.8	51.6	112.9	132.4	99.3	64.2	109.0	416.5	816.5	914.8	1096.8
85°	23.4	25.3	39.9	49.6	38.0	32.1	33.1	175.2	397.1	403.9	437.9
87.5°	10.7	10.7	14.6	15.6	9.7	5.8	3.9	2.9	2.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P233475

CATALOG NUMBER: VRDN-C02-D-UNV-T2-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0	1960.0
2.5°	1931.7	1941.5	1924.9	1912.3	1902.5	1896.7	1889.9	1873.3	1878.2	1885.0	1884.1
5°	1941.5	1946.3	1917.1	1877.2	1840.3	1814.0	1796.5	1770.2	1770.2	1780.9	1780.9
7.5°	1950.2	1943.4	1884.1	1816.9	1775.1	1753.7	1725.4	1697.2	1692.3	1700.1	1701.1
10°	1955.1	1925.9	1843.2	1780.9	1726.4	1682.6	1646.6	1614.5	1613.5	1624.2	1626.2
12.5°	1976.5	1920.1	1840.3	1754.6	1672.9	1626.2	1583.3	1547.3	1534.7	1535.7	1537.6
15°	2009.6	1943.4	1836.4	1718.6	1630.1	1567.8	1505.5	1459.8	1448.1	1463.6	1469.5
17.5°	2049.5	1981.4	1817.9	1685.5	1577.5	1502.6	1440.3	1399.4	1362.4	1345.9	1343.0
20°	2102.0	2013.5	1827.6	1636.9	1526.9	1426.7	1348.8	1299.2	1268.0	1266.1	1264.1
22.5°	2171.1	2049.5	1829.6	1604.8	1447.1	1343.0	1246.6	1218.4	1162.9	1142.5	1151.3
25°	2262.6	2104.0	1824.7	1570.7	1385.8	1245.7	1129.8	1078.3	1057.8	1034.5	1036.4
27.5°	2380.4	2190.6	1837.3	1525.9	1285.6	1126.9	997.5	942.0	910.9	891.4	894.3
30°	2619.8	2322.0	1836.4	1483.1	1193.1	1004.3	858.3	821.4	790.2	772.7	781.5
32.5°	2960.4	2607.1	1877.2	1425.7	1088.0	839.8	741.6	699.7	673.4	654.0	658.8
35°	3381.8	2917.6	1982.3	1347.8	968.3	714.3	647.2	595.6	563.5	555.7	552.8
37.5°	3773.0	3192.0	2081.6	1296.3	831.1	645.2	560.5	509.0	480.7	490.5	490.5
40°	4122.3	3556.0	2193.5	1213.5	706.5	566.4	464.2	440.8	426.2	442.8	448.6
42.5°	4386.1	3905.3	2345.3	1104.5	605.3	473.0	397.1	413.6	419.4	431.1	428.2
45°	4713.1	4104.8	2495.2	1003.3	516.8	394.1	383.4	417.5	431.1	441.8	437.0
47.5°	5013.8	4259.6	2465.0	816.5	435.0	381.5	390.2	417.5	440.8	458.4	455.4
50°	5272.6	4453.2	2407.6	634.5	417.5	393.2	397.1	406.8	441.8	453.5	453.5
52.5°	5434.2	4644.9	2336.6	512.9	430.1	407.8	400.9	400.0	423.3	432.1	424.3
55°	5628.8	4843.5	2152.6	475.9	435.0	417.5	411.7	402.9	409.7	402.9	406.8
57.5°	5844.9	5039.1	1870.4	465.2	432.1	414.6	445.7	399.0	395.1	370.8	364.9
60°	6034.6	5115.9	1623.2	440.8	416.5	406.8	414.6	394.1	374.7	342.6	329.9
62.5°	6105.7	5109.1	1372.2	415.5	393.2	395.1	394.1	379.5	362.0	329.9	322.1
65°	6020.0	4953.4	1112.3	385.4	374.7	382.5	372.7	351.3	322.1	295.8	289.0
67.5°	5730.0	4556.4	826.2	345.5	344.5	359.1	352.3	323.1	291.0	270.5	270.5
70°	5175.3	4067.8	535.2	287.1	308.5	333.8	333.8	302.7	260.8	243.3	248.2
72.5°	4568.1	3500.5	346.4	213.1	243.3	302.7	300.7	279.3	240.4	218.0	219.0
75°	3956.9	2777.4	223.8	146.9	157.7	257.9	266.6	227.7	186.8	159.6	154.7
77.5°	3008.1	2089.4	142.1	85.6	100.2	157.7	202.4	189.8	190.7	232.6	230.6
80°	1850.0	1259.3	103.2	41.8	49.6	103.2	163.5	181.0	254.0	167.4	153.8
82.5°	926.5	588.8	54.5	25.3	28.2	45.7	97.3	217.0	184.9	110.9	105.1
85°	346.4	158.6	16.5	12.7	15.6	23.4	39.9	198.5	117.8	88.6	86.6
87.5°	1.9	2.9	2.9	3.9	5.8	6.8	14.6	94.4	59.4	42.8	40.9
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)