

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: P144265

Luminaire Tested: **LDRL-5XQ-F05-E**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144265
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5XQ-F05-E
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12763.1 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G3

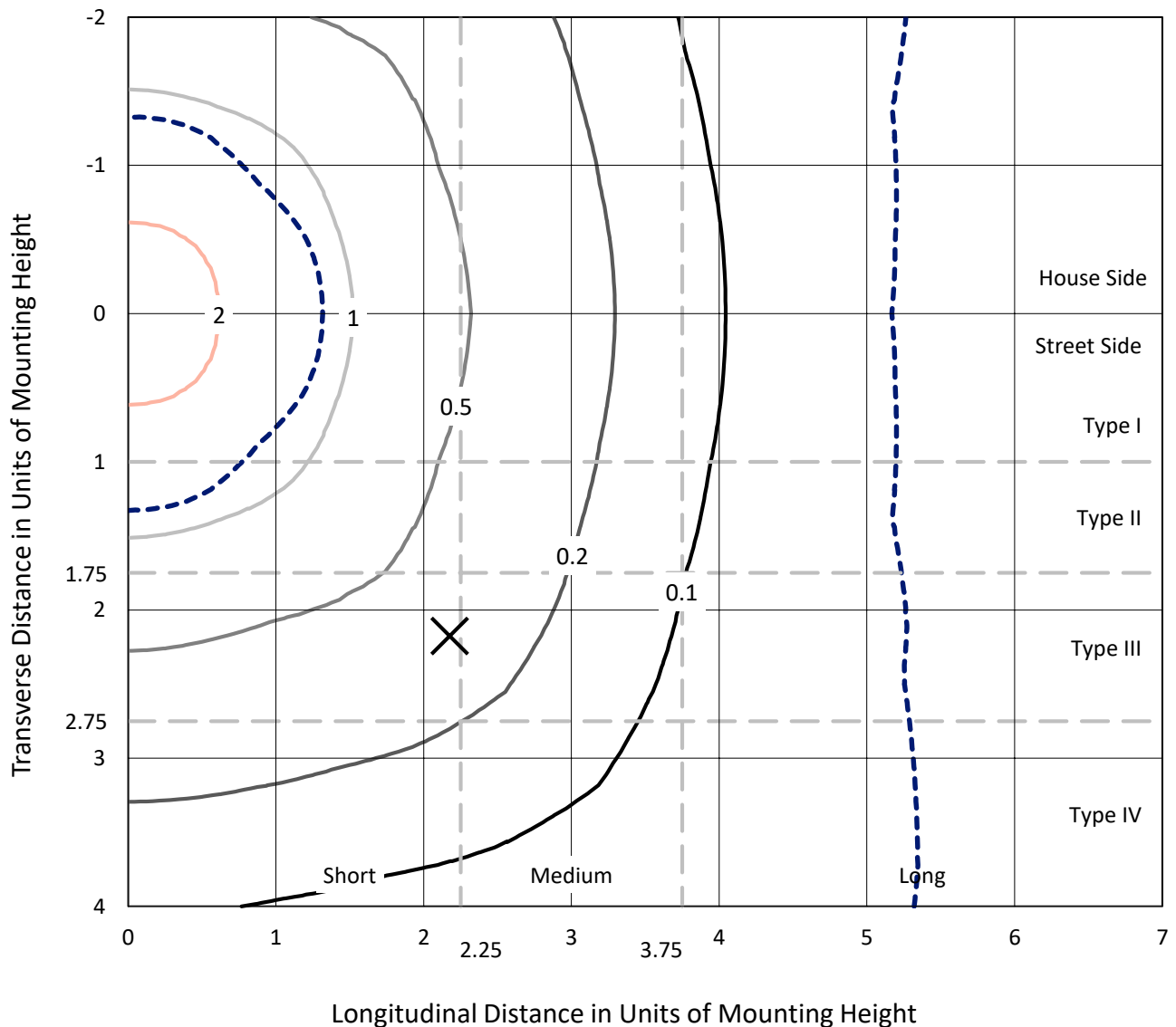
Input Watts (W): 133.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

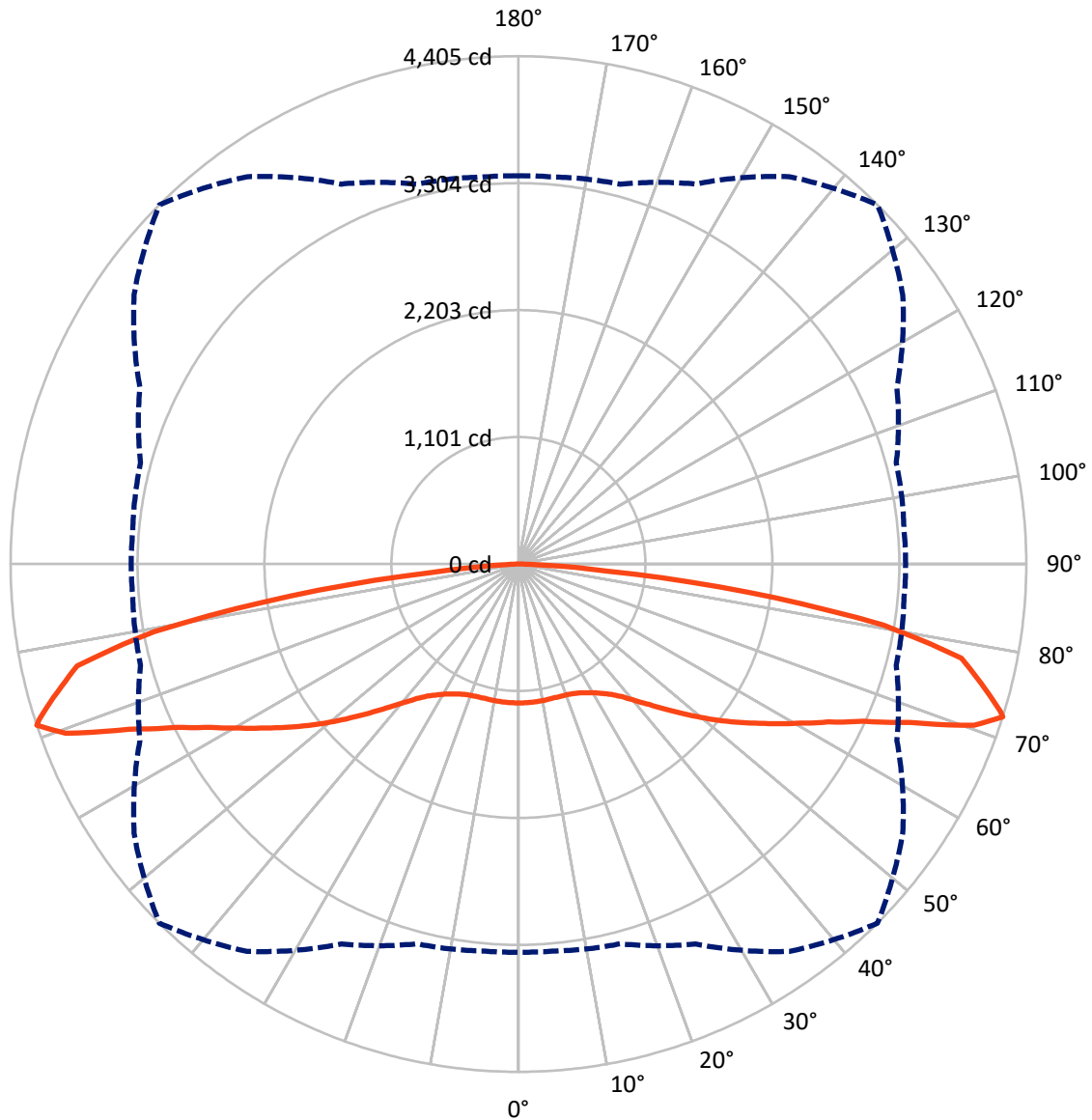
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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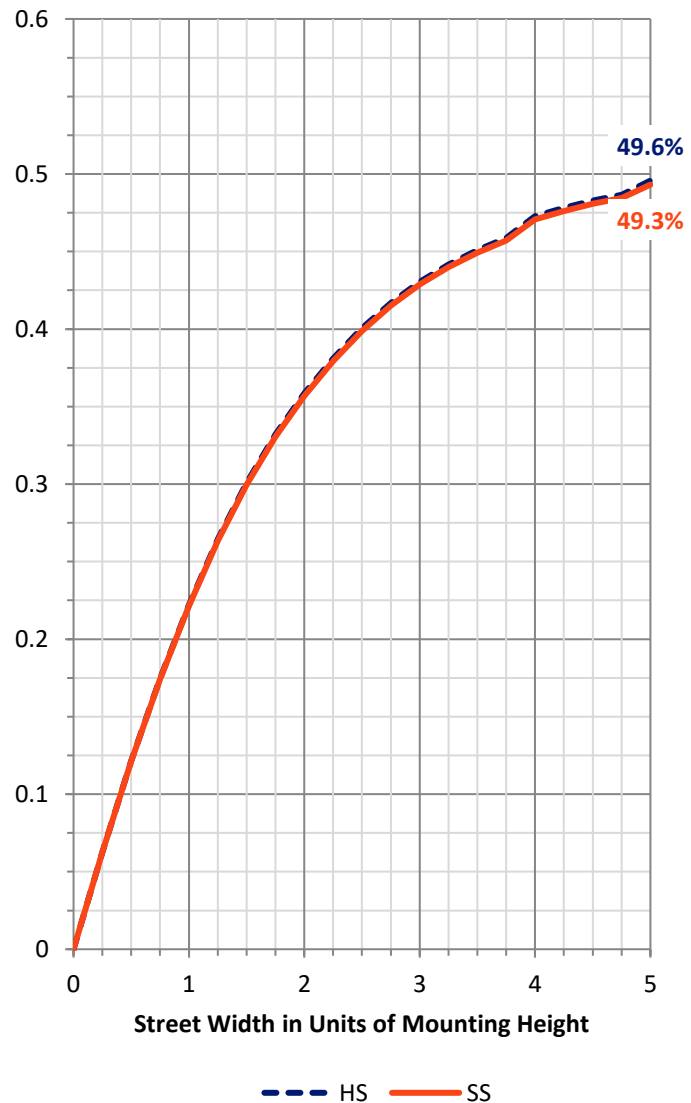
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6381.5	0.0	6381.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6381.5	0.0	6381.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	12763.1	0.0	12763.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.0	0.9
10°-20°	341.7	2.7
20°-30°	574.0	4.5
30°-40°	873.6	6.8
40°-50°	1381.1	10.8
50°-60°	2109.4	16.5
60°-70°	3090.4	24.2
70°-80°	3510.9	27.5
80°-90°	766.9	6.0
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°	12763.1	100.0
0°-180°	12763.1	100.0



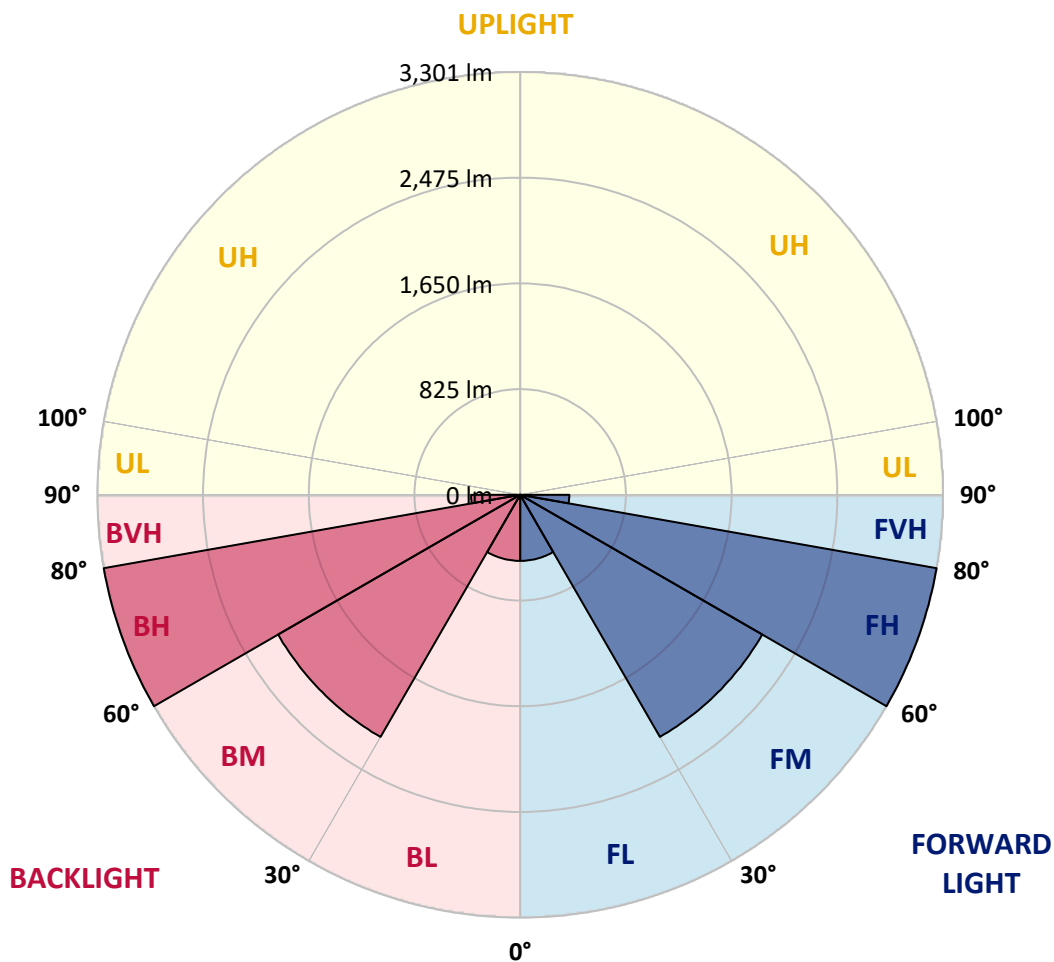
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	515.4	4.0			
FM (30°-60°)	2182.1	17.1			
FH (60°-80°)	3300.6	25.9			G2/5000
FVH (80°-90°)	383.4	3.0			G3/500
BL (0°-30°)	515.4	4.0	B2/1000		
BM (30°-60°)	2182.1	17.1	B2/2500		
BH (60°-80°)	3300.6	25.9	B4/5000		G2/5000
BVH (80°-90°)	383.4	3.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3
2.5°	1207.8	1207.4	1206.5	1205.7	1205.3	1204.8	1204.8	1204.8	1204.6	1204.4	1204.6
5°	1207.8	1207.3	1206.7	1206.1	1205.5	1204.8	1204.8	1204.8	1204.6	1204.4	1204.8
7.5°	1206.1	1206.5	1205.9	1205.2	1205.1	1204.8	1204.6	1204.4	1204.0	1203.6	1203.8
10°	1206.5	1208.2	1206.9	1205.7	1205.3	1204.8	1204.0	1203.2	1203.0	1202.8	1202.4
12.5°	1207.4	1209.0	1207.6	1206.1	1205.5	1204.8	1204.0	1203.2	1202.6	1202.0	1201.3
15°	1209.8	1211.1	1209.8	1208.6	1207.4	1206.1	1205.3	1204.4	1203.2	1202.0	1201.4
17.5°	1211.5	1213.5	1212.0	1210.6	1209.2	1207.8	1206.9	1206.1	1205.3	1204.4	1203.4
20°	1214.4	1216.4	1215.2	1213.9	1213.1	1212.3	1211.7	1211.1	1210.4	1209.8	1208.4
22.5°	1219.7	1221.4	1220.9	1220.5	1220.7	1220.9	1221.1	1221.4	1220.9	1220.6	1219.1
25°	1230.8	1230.8	1231.7	1232.5	1233.7	1234.9	1236.0	1237.0	1237.7	1238.3	1236.4
27.5°	1250.3	1251.9	1252.5	1253.2	1255.2	1257.2	1259.5	1261.8	1263.0	1264.2	1262.4
30°	1275.4	1275.4	1276.9	1278.4	1281.8	1285.4	1288.2	1291.2	1293.4	1295.7	1294.2
32.5°	1307.6	1309.7	1311.8	1313.8	1318.1	1322.4	1327.4	1332.4	1335.3	1338.2	1335.9
35°	1356.8	1359.2	1361.3	1363.4	1367.9	1372.4	1378.0	1383.6	1386.1	1388.6	1387.1
37.5°	1426.1	1426.1	1429.0	1431.9	1434.8	1437.6	1445.1	1452.5	1455.6	1458.7	1456.2
40°	1519.8	1520.2	1520.8	1521.4	1524.1	1526.8	1535.9	1545.0	1550.4	1555.7	1550.6
42.5°	1627.5	1632.1	1631.9	1631.6	1633.5	1635.4	1644.0	1652.7	1660.4	1668.0	1664.9
45°	1754.6	1753.8	1752.2	1750.5	1756.1	1761.7	1774.1	1786.4	1793.2	1800.0	1793.7
47.5°	1883.0	1881.8	1879.5	1877.2	1882.8	1888.4	1907.0	1925.6	1935.2	1945.0	1934.6
50°	2011.0	2016.0	2013.0	2010.2	2018.4	2026.6	2050.2	2073.7	2088.0	2102.2	2090.2
52.5°	2152.6	2156.3	2153.0	2149.7	2161.0	2172.4	2200.2	2228.0	2247.0	2266.0	2250.0
55°	2299.1	2294.6	2296.4	2298.2	2309.0	2319.7	2354.0	2388.2	2411.0	2433.6	2415.5
57.5°	2436.1	2437.8	2435.9	2434.0	2451.0	2467.9	2511.0	2554.2	2582.7	2611.2	2588.4
60°	2576.4	2576.8	2572.8	2568.6	2587.0	2605.4	2667.2	2729.2	2766.1	2803.0	2771.9
62.5°	2733.3	2732.9	2725.7	2718.4	2740.1	2761.8	2838.6	2915.4	2966.1	3016.9	2978.9
65°	2925.7	2920.7	2916.6	2912.4	2937.4	2962.4	3057.7	3153.1	3221.6	3290.1	3241.2
67.5°	3209.2	3205.5	3196.8	3188.2	3216.0	3243.9	3366.1	3488.2	3576.8	3665.3	3600.7
70°	3521.2	3514.3	3520.3	3526.2	3590.6	3655.0	3818.9	3982.8	4087.6	4192.4	4083.8
72°	3367.4	3370.2	3390.2	3410.2	3523.2	3636.0	3868.8	4101.6	4253.3	4405.0	4237.2
72.5°	3313.6	3316.2	3338.8	3361.6	3469.3	3577.0	3817.0	4057.0	4214.1	4371.2	4198.6
75°	3085.8	3092.5	3118.7	3144.9	3254.0	3363.2	3605.3	3847.4	3997.8	4148.2	3975.5
77.5°	2713.9	2734.6	2761.2	2787.8	2917.8	3047.8	3321.5	3595.2	3761.3	3927.4	3731.4
80°	2071.2	2063.8	2109.6	2155.4	2279.7	2404.0	2615.7	2827.4	3018.7	3210.0	2989.6
82.5°	804.9	822.6	917.6	1012.5	1142.7	1273.0	1462.6	1652.3	1824.6	1997.0	1813.5
85°	83.0	94.6	128.6	162.6	233.6	304.6	420.2	535.8	649.0	762.3	639.4
87.5°	33.4	36.8	47.3	57.8	60.5	63.2	76.4	89.6	89.0	88.3	87.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3	1205.3
2.5°	1204.8	1205.3	1205.7	1205.7	1205.6	1206.3	1206.9	1206.1
5°	1205.2	1205.5	1205.7	1205.7	1205.6	1206.3	1206.9	1206.1
7.5°	1204.0	1204.0	1204.0	1204.6	1205.2	1205.5	1205.7	1205.3
10°	1202.0	1202.2	1202.4	1203.0	1203.6	1204.2	1204.8	1205.3
12.5°	1200.7	1200.9	1201.1	1201.8	1202.4	1203.0	1203.6	1204.4
15°	1200.8	1201.0	1201.2	1201.6	1201.9	1202.8	1203.6	1204.4
17.5°	1202.4	1202.0	1201.6	1202.0	1202.4	1203.4	1204.4	1205.3
20°	1207.0	1206.3	1205.7	1205.7	1205.6	1206.7	1207.8	1207.7
22.5°	1217.6	1215.6	1213.5	1213.1	1212.7	1212.9	1213.1	1213.5
25°	1234.6	1231.2	1228.0	1226.9	1225.9	1225.5	1225.1	1225.9
27.5°	1260.6	1256.9	1253.2	1250.9	1248.6	1247.4	1246.2	1246.5
30°	1292.8	1288.4	1284.1	1280.4	1276.6	1275.0	1273.4	1273.8
32.5°	1333.6	1328.5	1323.4	1318.4	1313.4	1311.2	1308.9	1309.3
35°	1385.6	1379.6	1373.6	1369.6	1365.4	1361.9	1358.4	1361.3
37.5°	1453.8	1448.2	1442.6	1439.9	1437.2	1434.2	1431.1	1431.5
40°	1545.4	1539.6	1533.8	1531.6	1529.3	1525.4	1521.4	1522.3
42.5°	1661.8	1653.1	1644.4	1640.3	1636.2	1634.3	1632.4	1633.7
45°	1787.3	1778.6	1770.0	1766.4	1762.9	1758.0	1753.0	1757.5
47.5°	1924.3	1913.4	1902.4	1896.2	1890.0	1891.7	1893.4	1889.6
50°	2078.2	2059.9	2041.6	2034.3	2027.0	2027.0	2027.0	2026.7
52.5°	2233.9	2208.5	2183.1	2176.9	2170.7	2169.2	2167.8	2166.2
55°	2397.3	2366.2	2335.0	2323.5	2311.9	2313.5	2315.1	2319.7
57.5°	2565.8	2524.7	2483.6	2470.4	2457.1	2458.2	2459.2	2466.7
60°	2740.8	2687.7	2634.6	2620.0	2605.4	2609.3	2613.2	2617.7
62.5°	2941.0	2876.8	2812.6	2793.0	2773.4	2778.3	2783.2	2795.2
65°	3192.3	3112.2	3032.2	3011.7	2991.2	2993.5	2995.8	3016.5
67.5°	3536.1	3429.4	3322.8	3304.0	3285.2	3288.5	3291.8	3325.2
70°	3975.3	3817.2	3659.2	3581.4	3503.6	3491.4	3479.2	3496.9
72°	4069.4	3846.1	3622.8	3508.0	3393.3	3375.4	3357.4	3359.1
72.5°	4026.0	3800.3	3574.5	3463.1	3351.6	3337.0	3322.4	3319.4
75°	3802.8	3582.0	3361.1	3246.0	3130.8	3103.0	3075.1	3075.1
77.5°	3535.3	3256.9	2978.5	2854.2	2730.0	2700.9	2671.8	2649.1
80°	2769.2	2519.7	2270.2	2144.1	2018.0	1971.4	1924.7	1897.1
82.5°	1630.0	1400.5	1171.0	1010.9	850.8	802.6	754.5	687.7
85°	516.4	397.3	278.2	217.1	156.0	126.1	96.2	84.2
87.5°	85.8	69.8	53.6	51.8	49.9	39.2	28.5	23.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)