

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: P962129

Luminaire Tested: **NAV-SB2B-835-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962129
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10582.1 lumens
Efficiency: N/A
Efficacy: 143.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 73.9
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: 24 FT



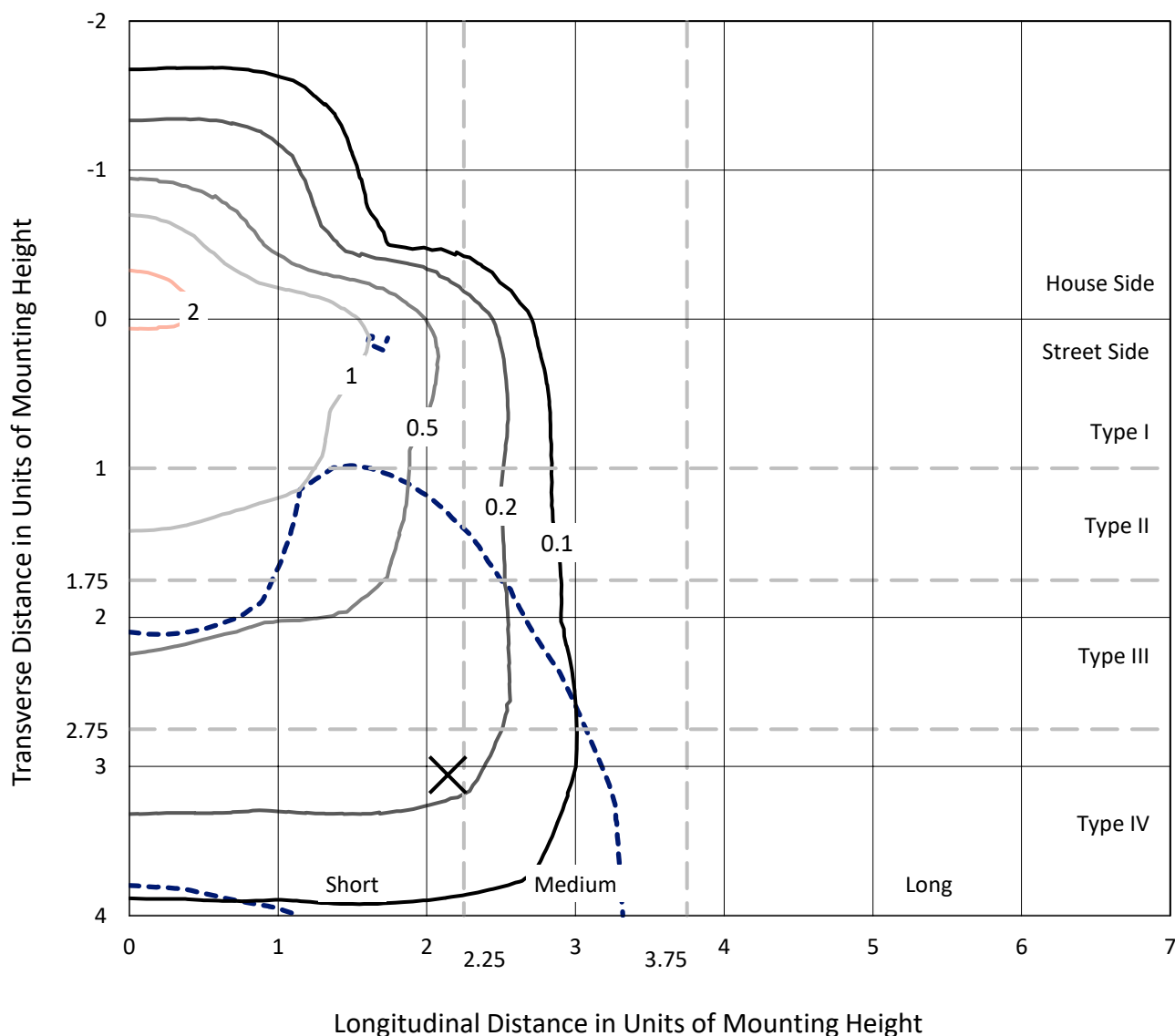
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

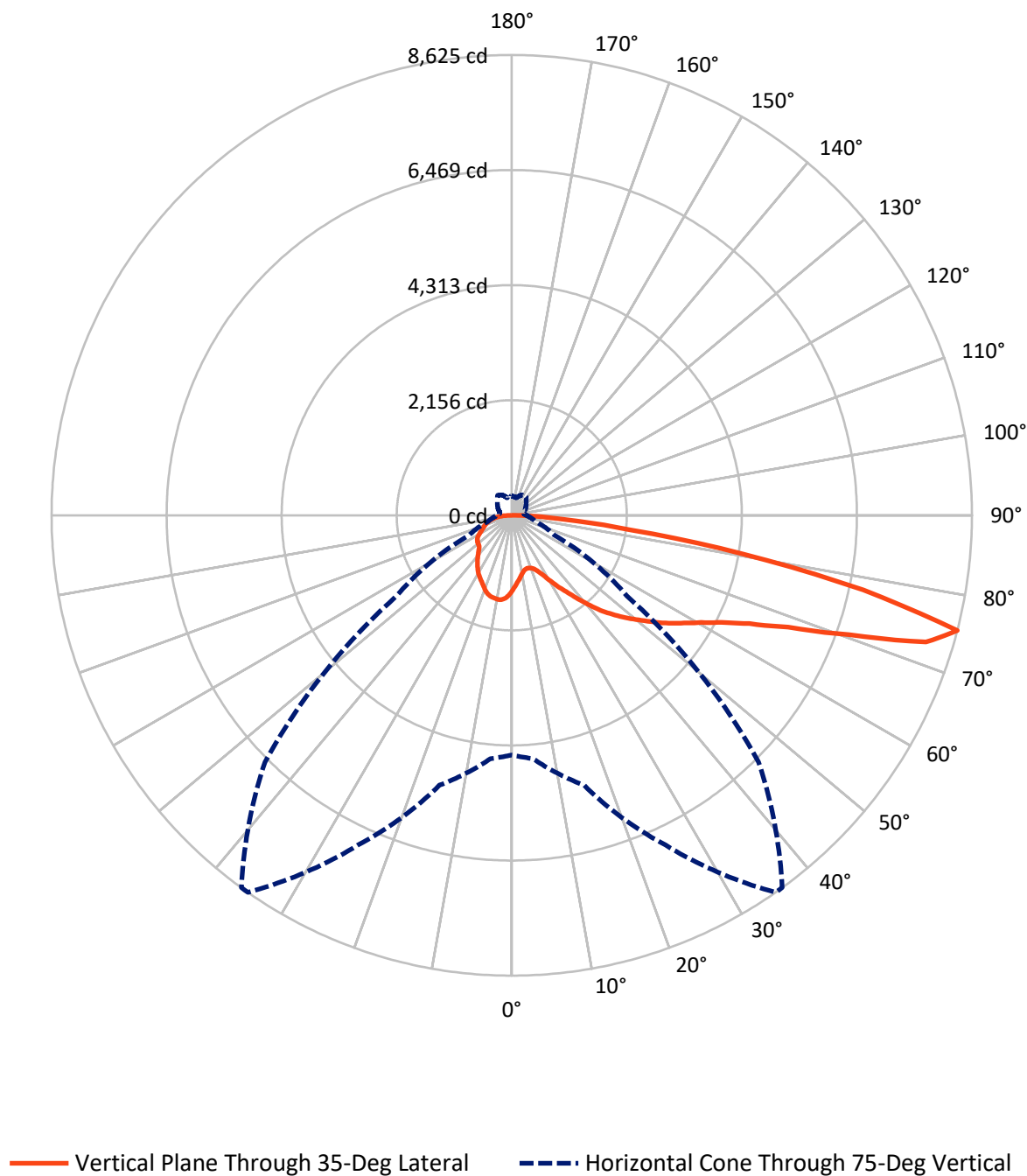


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2518.3	0.0	2518.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	8063.8	0.0	8063.8
	% Fixture	76.2	0.0	76.2
Total	Lumens	10582.1	0.0	10582.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	1.3
10°-20°	385.1	3.6
20°-30°	646.7	6.1
30°-40°	1005.1	9.5
40°-50°	1491.8	14.1
50°-60°	2059.5	19.5
60°-70°	2498.6	23.6
70°-80°	2064.9	19.5
80°-90°	297.0	2.8
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°	10582.1	100.0
0°-180°	10582.1	100.0

Coefficient of Utilization



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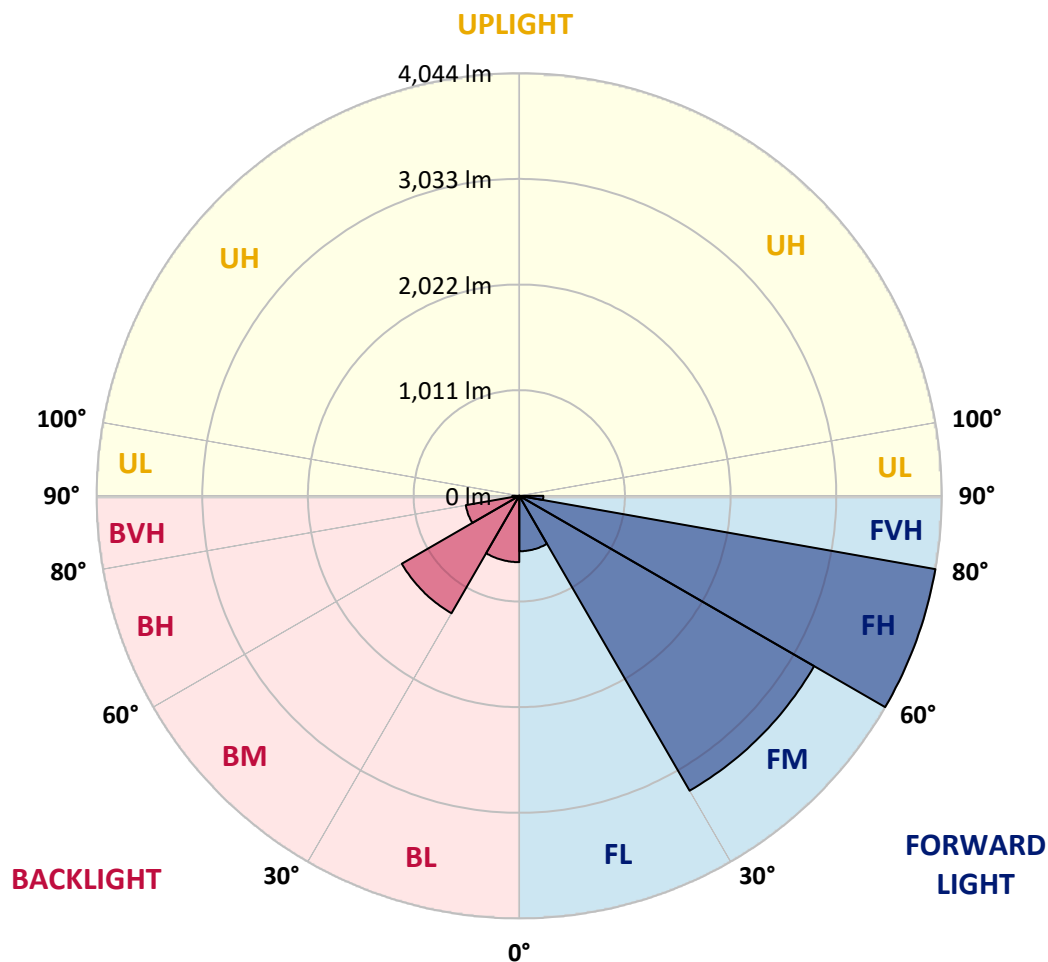
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	530.7	5.0			
FM	(30°-60°)	3258.7	30.8			
FH	(60°-80°)	4044.3	38.2			G2/5000
FVH	(80°-90°)	230.1	2.2			G3/500
BL	(0°-30°)	634.6	6.0	B2/1000		
BM	(30°-60°)	1297.6	12.3	B2/2500		
BH	(60°-80°)	519.2	4.9	B2/1000		G2/1000
BVH	(80°-90°)	66.9	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1
2.5°	1300.3	1308.3	1311.7	1310.1	1318.6	1317.4	1329.4	1344.4	1365.0	1385.0	1414.1
5°	1200.2	1208.8	1216.2	1223.0	1239.6	1244.8	1263.7	1292.3	1330.0	1368.4	1416.4
7.5°	1106.9	1114.4	1125.9	1138.4	1166.4	1171.6	1203.0	1247.6	1300.3	1356.4	1422.7
10°	1030.8	1038.3	1050.3	1064.6	1099.5	1105.8	1145.8	1205.3	1274.0	1344.9	1429.6
12.5°	998.2	1000.5	1007.4	1021.7	1052.1	1056.1	1100.0	1168.2	1248.2	1336.3	1439.9
15°	996.5	1001.1	1001.7	1009.1	1034.3	1036.0	1076.7	1144.1	1232.3	1334.7	1455.3
17.5°	1013.7	1017.1	1012.0	1016.6	1037.7	1040.6	1072.7	1132.7	1227.0	1342.0	1481.6
20°	1059.4	1062.3	1046.8	1040.6	1056.1	1058.3	1089.8	1140.1	1232.3	1357.5	1517.7
22.5°	1156.7	1158.5	1120.6	1094.9	1096.0	1097.3	1124.6	1170.4	1252.2	1385.5	1563.4
25°	1308.3	1307.2	1247.1	1197.3	1168.7	1162.5	1180.7	1219.6	1286.0	1422.7	1622.4
27.5°	1485.6	1477.0	1417.0	1342.6	1280.3	1271.1	1267.1	1283.7	1334.0	1471.9	1694.4
30°	1685.9	1677.8	1613.2	1516.0	1429.6	1414.7	1377.0	1368.4	1405.6	1538.8	1794.6
32.5°	1905.6	1900.4	1823.2	1705.3	1589.8	1572.6	1509.1	1486.2	1515.4	1640.1	1934.2
35°	2089.8	2085.2	2021.1	1899.8	1758.5	1737.4	1672.7	1647.0	1661.8	1770.0	2116.6
37.5°	2256.2	2254.0	2199.0	2103.5	1957.6	1931.8	1859.2	1850.6	1847.8	1941.0	2338.0
40°	2410.7	2405.0	2347.8	2297.4	2189.3	2165.8	2101.8	2094.3	2072.5	2151.6	2588.6
42.5°	2581.8	2566.8	2483.9	2460.4	2431.3	2411.8	2373.5	2374.6	2326.5	2389.0	2854.0
45°	2721.3	2712.8	2627.5	2613.8	2645.2	2637.2	2670.4	2678.9	2585.8	2637.7	3129.7
47.5°	2871.2	2863.1	2791.1	2781.3	2866.6	2868.9	2986.1	2989.0	2838.5	2896.3	3406.1
50°	3055.9	3044.6	2973.0	2985.0	3080.5	3089.1	3303.7	3284.2	3071.4	3158.9	3680.1
52.5°	3177.8	3184.7	3169.2	3188.7	3319.2	3327.2	3616.0	3566.3	3301.9	3418.1	3948.9
55°	3267.6	3281.3	3329.4	3374.0	3570.8	3578.8	3910.6	3834.5	3493.0	3658.3	4201.8
57.5°	3383.2	3363.7	3453.5	3540.5	3809.9	3831.1	4197.3	4093.1	3662.3	3865.5	4375.1
60°	3549.1	3535.3	3605.1	3733.9	4077.7	4111.4	4500.5	4325.9	3786.5	4029.6	4408.9
62.5°	3885.5	3851.1	3862.0	3975.9	4415.2	4459.8	4842.5	4529.1	3848.3	4093.6	4228.1
65°	4388.3	4329.4	4274.5	4353.4	4890.6	4934.7	5228.6	4688.7	3825.4	3969.5	3748.1
67.5°	5021.6	4963.3	4895.7	4970.1	5590.8	5625.7	5705.2	4778.4	3645.2	3491.3	2899.8
70°	5543.9	5522.1	5602.8	5908.8	6709.1	6710.3	6316.2	4704.0	3151.5	2475.3	1677.8
72.5°	5474.6	5461.5	5886.6	6832.8	8118.7	8088.4	6894.5	4141.2	2122.9	1116.6	628.7
75°	4491.2	4576.5	5235.0	6816.1	8625.0	8621.0	6540.4	2632.6	878.1	462.8	324.9
77.5°	2408.3	2543.4	3398.6	5032.4	6733.2	6834.4	4598.3	921.1	377.0	296.3	224.8
80°	785.5	903.3	1354.6	2562.3	4375.1	4356.2	1970.8	361.5	258.0	209.9	155.6
82.5°	333.5	347.3	605.3	1209.9	2245.4	2210.4	627.5	207.7	181.3	143.6	96.1
85°	130.4	145.9	267.1	559.4	972.5	951.3	226.5	103.0	116.1	93.8	57.2
87.5°	42.9	52.1	95.5	191.7	302.6	291.7	55.5	35.5	50.3	42.9	20.6
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°	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1	1410.1
2.5°	1422.2	1431.3	1442.2	1458.2	1471.9	1483.4	1495.4	1502.9	1505.6	1514.2	1513.7
5°	1432.4	1452.4	1479.4	1505.6	1531.5	1546.8	1560.6	1567.4	1573.8	1578.3	1579.4
7.5°	1449.7	1475.4	1517.7	1552.1	1573.8	1586.3	1595.5	1593.2	1595.5	1596.6	1598.4
10°	1464.5	1500.5	1550.8	1583.5	1600.0	1600.6	1598.4	1590.3	1586.3	1586.9	1588.0
12.5°	1482.3	1522.2	1576.7	1604.0	1608.6	1596.0	1586.3	1572.6	1567.4	1565.2	1564.0
15°	1506.2	1552.1	1604.6	1614.9	1603.5	1587.5	1570.9	1548.6	1537.1	1528.0	1530.8
17.5°	1535.4	1585.8	1626.4	1619.0	1594.4	1568.0	1541.2	1507.4	1483.9	1474.3	1474.8
20°	1576.0	1621.2	1643.0	1610.4	1573.2	1533.1	1487.4	1446.2	1424.4	1414.7	1413.6
22.5°	1625.2	1668.7	1659.0	1595.5	1542.8	1478.8	1421.6	1391.2	1380.4	1373.5	1374.6
25°	1684.2	1721.4	1670.4	1573.8	1493.1	1406.7	1362.6	1352.9	1347.8	1342.6	1342.6
27.5°	1760.8	1780.8	1679.1	1541.7	1415.3	1330.0	1314.0	1315.8	1314.0	1305.4	1307.2
30°	1862.1	1858.0	1687.0	1489.6	1326.0	1260.9	1262.0	1269.4	1270.6	1264.8	1267.7
32.5°	1995.4	1954.8	1691.0	1422.2	1240.8	1200.2	1201.3	1209.3	1215.0	1205.3	1209.9
35°	2156.7	2067.4	1684.7	1337.5	1175.1	1142.4	1133.9	1136.1	1137.9	1128.7	1135.0
37.5°	2344.9	2193.9	1656.7	1243.6	1120.6	1085.8	1067.4	1052.1	1042.8	1034.3	1040.0
40°	2551.4	2331.8	1605.3	1152.1	1060.1	1025.7	998.2	969.0	938.2	926.7	931.9
42.5°	2767.6	2473.6	1542.8	1064.6	990.3	962.2	933.1	890.7	844.4	820.9	823.8
45°	2991.9	2618.9	1481.6	978.3	918.7	906.7	873.0	822.0	771.7	742.0	739.6
47.5°	3211.5	2756.2	1391.8	891.2	851.8	865.0	838.7	791.7	735.6	688.8	683.6
50°	3421.6	2885.0	1244.8	803.2	797.4	852.4	827.2	759.7	695.7	635.6	630.4
52.5°	3629.7	2989.0	1056.6	723.1	768.2	848.9	812.3	738.0	659.6	596.7	589.8
55°	3806.5	3042.8	875.2	654.5	725.9	819.8	794.6	712.2	608.6	541.7	536.0
57.5°	3907.2	2999.4	724.3	586.9	667.6	771.7	764.2	657.3	548.1	496.5	489.6
60°	3863.7	2823.2	600.6	528.0	612.1	719.7	711.7	602.9	501.7	453.0	446.2
62.5°	3624.0	2487.4	502.9	476.5	561.8	666.5	659.0	561.2	466.3	419.3	411.8
65°	3141.2	2023.4	426.8	433.6	510.9	602.4	613.3	526.3	438.2	392.5	385.0
67.5°	2395.8	1465.6	367.3	396.5	461.0	539.5	570.9	501.1	414.7	371.3	364.4
70°	1365.5	832.4	316.9	360.4	417.1	481.1	538.3	481.1	389.6	353.5	348.9
72.5°	517.7	382.1	274.0	324.3	374.7	431.9	502.2	449.7	360.4	333.5	328.9
75°	276.3	232.9	230.5	282.0	326.1	383.9	457.0	418.7	338.7	352.4	363.9
77.5°	188.2	164.7	192.8	241.4	272.9	330.7	409.0	371.9	293.5	292.3	269.5
80°	130.4	116.7	156.7	194.5	211.0	278.0	357.0	319.2	239.1	223.1	213.4
82.5°	78.4	76.1	117.3	145.3	149.3	214.5	295.7	267.7	195.7	170.5	171.6
85°	42.9	45.2	74.9	85.3	86.9	149.9	231.6	207.0	150.5	126.4	127.6
87.5°	12.0	15.5	27.5	33.7	41.7	77.8	137.9	123.0	75.5	52.6	52.6
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)