

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: P963711

Luminaire Tested: **NAV-SB3A-835-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963711
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9856.4 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

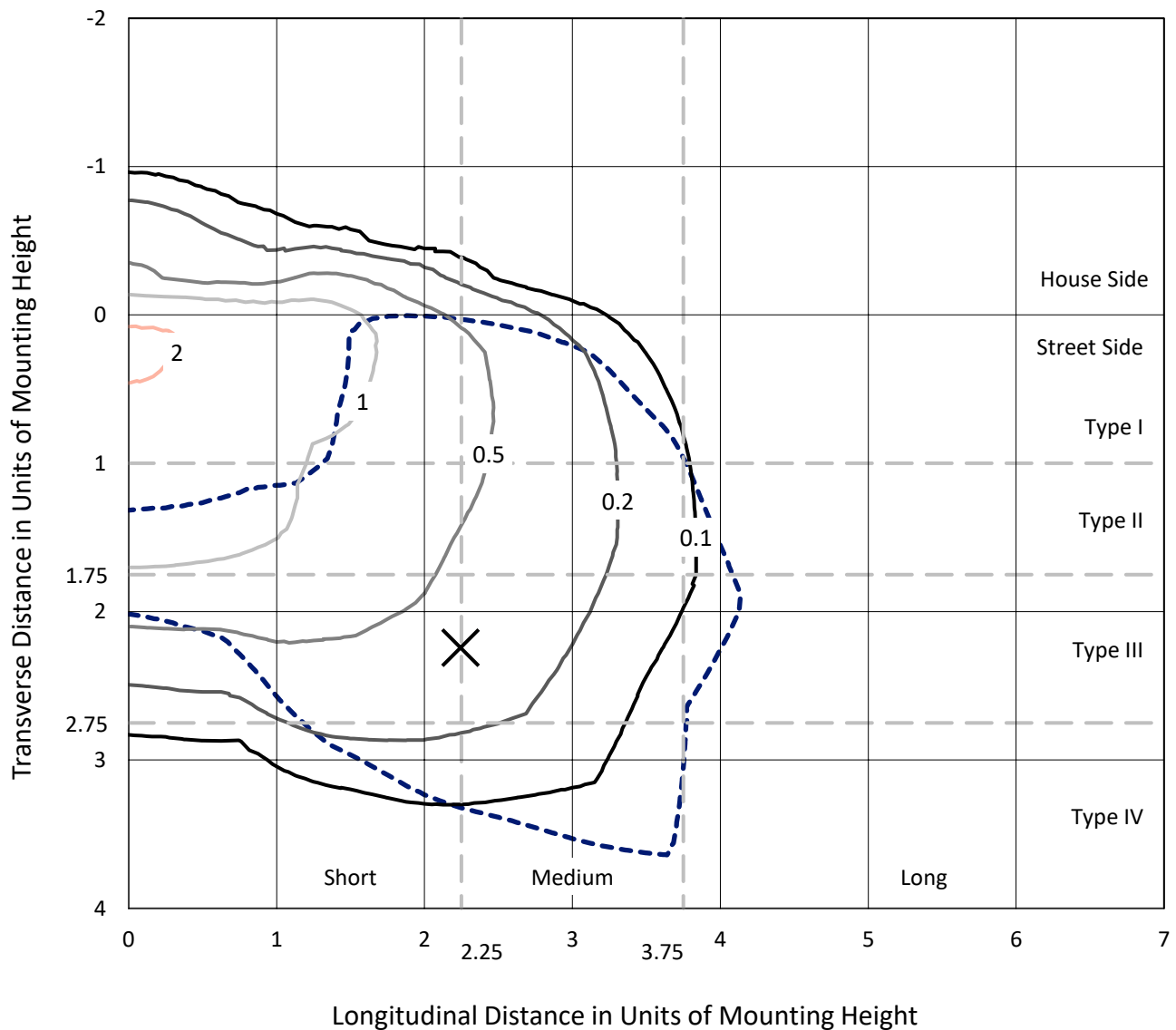
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

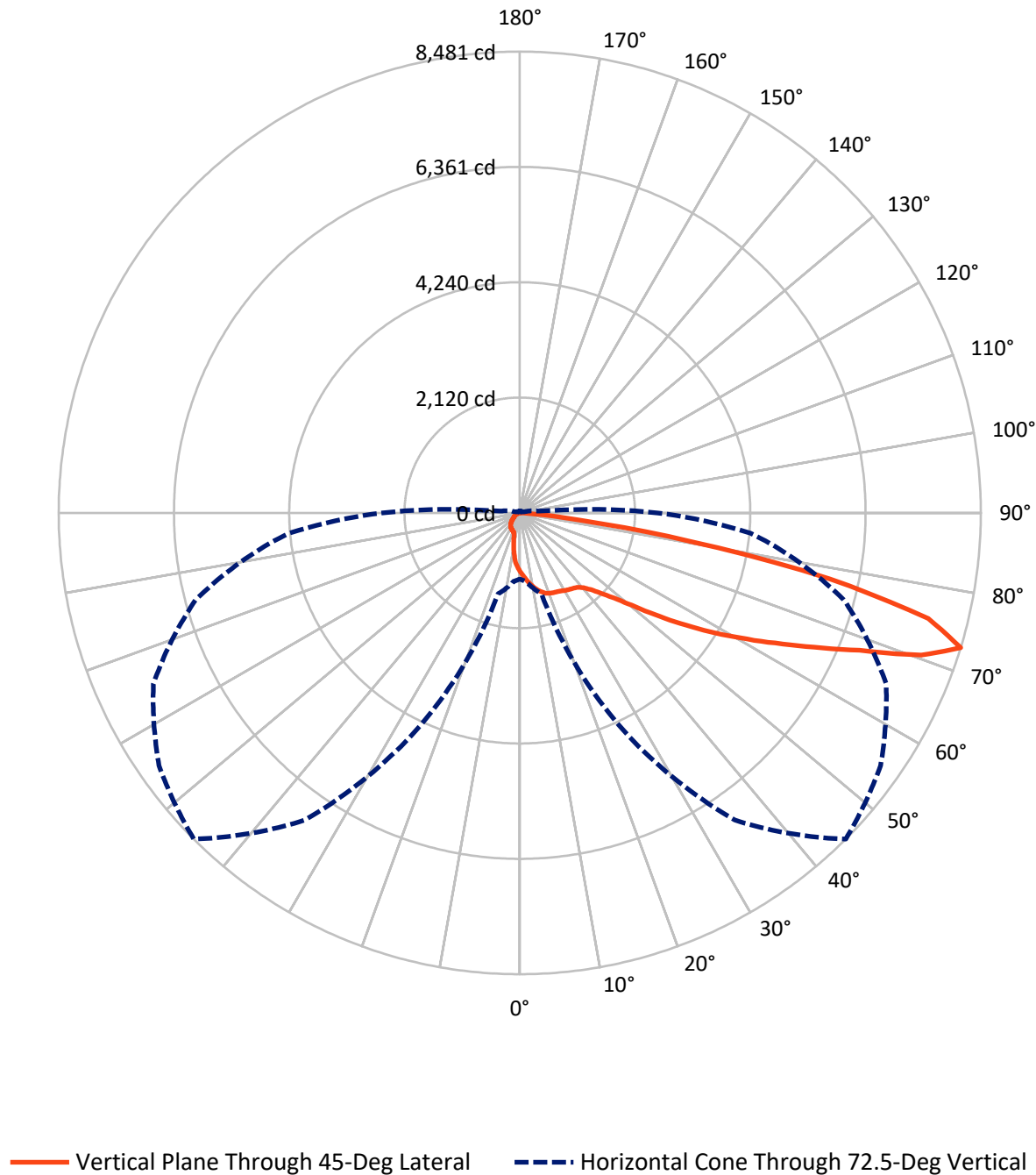
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	1035.6	0.0	1035.6
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	8820.8	0.0	8820.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	9856.4	0.0	9856.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	1.0
10°-20°	297.3	3.0
20°-30°	488.3	5.0
30°-40°	692.5	7.0
40°-50°	1144.6	11.6
50°-60°	2056.2	20.9
60°-70°	2855.1	29.0
70°-80°	2071.0	21.0
80°-90°	149.7	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°	9856.4	100.0
0°-180°	9856.4	100.0

Coefficient of Utilization



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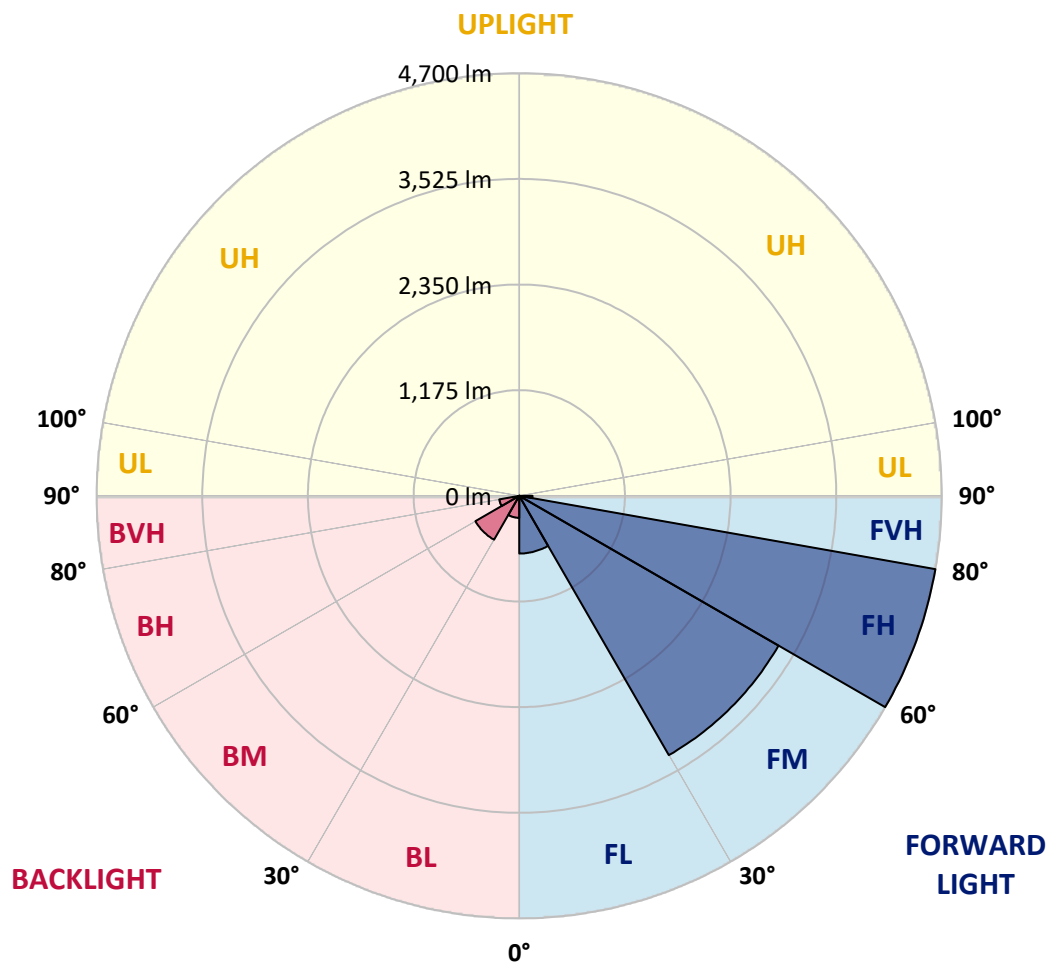
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	642.0	6.5			
FM	(30°-60°)	3330.0	33.8			
FH	(60°-80°)	4700.2	47.7			G2/5000
FVH	(80°-90°)	148.5	1.5			G2/225
BL	(0°-30°)	245.3	2.5	B1/500		
BM	(30°-60°)	563.2	5.7	B1/1000		
BH	(60°-80°)	225.8	2.3	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8
2.5°	1179.4	1181.4	1180.1	1172.0	1158.5	1151.1	1147.1	1133.6	1124.8	1109.4	1093.3
5°	1287.7	1295.7	1291.0	1274.9	1249.4	1231.1	1225.8	1198.2	1173.3	1144.4	1110.7
7.5°	1402.7	1406.7	1398.0	1377.2	1342.9	1311.9	1307.2	1268.8	1229.2	1184.7	1139.0
10°	1502.2	1507.0	1493.5	1463.3	1424.2	1385.9	1379.1	1336.8	1289.7	1235.2	1176.7
12.5°	1585.7	1590.4	1573.0	1536.6	1493.5	1453.9	1447.1	1402.7	1350.9	1290.4	1217.7
15°	1648.9	1657.7	1634.2	1595.1	1548.7	1509.0	1505.6	1462.0	1411.4	1344.2	1266.8
17.5°	1685.9	1694.7	1672.5	1625.4	1585.7	1552.1	1548.1	1511.7	1464.6	1400.0	1314.6
20°	1692.0	1700.1	1676.5	1635.5	1602.5	1575.6	1573.6	1547.3	1513.0	1451.2	1366.4
22.5°	1673.8	1684.0	1662.4	1629.4	1606.6	1592.4	1589.8	1574.9	1555.4	1503.0	1414.8
25°	1655.0	1663.1	1647.0	1618.0	1605.9	1604.5	1606.6	1603.9	1599.8	1555.4	1471.4
27.5°	1653.6	1662.4	1644.2	1616.6	1610.0	1624.0	1626.1	1638.9	1642.3	1603.2	1525.8
30°	1665.1	1671.2	1653.6	1624.7	1621.3	1653.6	1654.4	1677.2	1682.5	1643.6	1579.6
32.5°	1690.0	1696.7	1679.3	1636.8	1632.1	1677.2	1679.3	1709.5	1718.2	1686.6	1636.2
35°	1748.5	1756.5	1736.5	1670.4	1653.6	1699.4	1705.5	1741.2	1758.6	1732.4	1694.7
37.5°	1894.5	1870.9	1843.4	1738.4	1702.7	1734.4	1744.4	1786.2	1817.1	1786.9	1764.6
40°	2257.2	2183.1	2097.0	1854.1	1788.9	1809.0	1817.1	1858.8	1901.3	1871.6	1860.9
42.5°	2801.4	2713.9	2575.3	2120.5	1918.7	1928.8	1934.9	1971.2	2031.0	2007.6	2010.2
45°	3286.5	3254.9	3113.5	2575.3	2161.6	2111.8	2119.2	2138.0	2226.2	2217.5	2234.9
47.5°	3659.1	3641.0	3532.0	3097.4	2572.0	2335.9	2356.7	2365.5	2492.6	2523.5	2570.6
50°	3945.7	3939.1	3841.5	3561.7	3108.2	2666.1	2673.6	2654.7	2845.1	2921.9	3011.3
52.5°	4216.2	4239.1	4167.1	3992.9	3680.7	3098.8	3097.4	3008.6	3265.6	3381.4	3534.0
55°	4460.4	4468.5	4475.9	4432.8	4256.6	3591.2	3578.5	3433.1	3753.3	3873.1	4038.6
57.5°	4689.9	4693.2	4759.2	4847.3	4856.0	4120.0	4096.5	3922.3	4286.2	4371.6	4473.2
60°	4843.9	4859.4	4998.6	5243.5	5350.5	4665.6	4652.9	4475.3	4828.5	4868.1	4849.3
62.5°	4621.9	4716.1	5067.3	5553.0	5817.4	5270.4	5264.4	5097.5	5399.0	5366.7	5205.2
65°	3741.2	3900.7	4518.3	5762.2	6275.6	5945.9	5954.6	5777.0	5985.0	5880.0	5494.5
67.5°	2617.0	2785.2	3515.9	5779.1	6787.6	6739.1	6789.6	6511.0	6607.3	6371.8	5563.1
70°	1809.7	1896.6	2372.2	5417.1	7186.5	7831.7	7830.3	7412.5	7226.1	6595.8	5213.3
72.5°	1217.1	1262.1	1540.7	4297.6	6893.1	8480.8	8441.9	8101.5	7434.7	6168.6	4259.3
75°	513.3	546.3	713.1	2415.2	5453.4	7759.0	7653.4	7159.6	6605.9	4857.4	2657.4
77.5°	162.8	176.9	281.3	864.5	3003.9	5832.2	5720.5	4471.2	4427.5	2436.7	971.5
80°	77.4	90.2	158.1	347.2	1182.0	3172.1	3156.6	2028.4	1904.6	657.9	195.1
82.5°	33.6	39.7	87.4	185.7	528.8	1131.6	1154.5	690.2	571.1	249.6	59.9
85°	10.8	14.1	40.4	85.5	223.3	281.3	277.9	164.2	230.1	135.9	20.8
87.5°	0.0	0.0	13.4	19.5	22.9	16.2	18.1	14.1	64.0	37.7	7.4
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°	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8	1079.8
2.5°	1085.2	1074.4	1055.5	1038.1	1022.6	1007.2	997.7	984.3	982.9	982.9	986.3
5°	1092.5	1075.1	1041.4	1005.8	964.7	925.7	886.7	849.0	836.9	828.2	832.2
7.5°	1114.1	1086.5	1033.4	965.4	887.3	802.0	742.1	677.5	652.6	639.1	641.1
10°	1145.0	1107.4	1026.6	907.5	781.0	664.7	579.2	509.3	482.4	471.0	471.0
12.5°	1179.4	1132.9	1014.5	835.6	664.7	525.4	442.0	409.7	405.7	405.7	405.7
15°	1220.4	1163.9	993.6	750.8	542.9	415.7	386.1	387.6	391.5	394.2	394.2
17.5°	1262.8	1196.9	960.7	655.9	435.3	374.0	374.7	376.8	380.1	382.8	382.8
20°	1308.5	1229.8	917.0	555.0	373.4	361.9	364.0	366.0	368.7	370.0	370.7
22.5°	1357.6	1260.8	865.2	456.1	352.5	351.9	352.5	354.5	357.9	357.9	359.3
25°	1410.1	1295.1	806.0	384.2	341.7	341.7	343.1	344.5	347.2	347.2	347.8
27.5°	1463.9	1326.7	743.4	346.4	332.3	331.7	331.7	333.7	335.1	335.7	336.4
30°	1523.1	1363.7	680.8	338.4	324.9	321.5	319.6	320.9	322.3	323.0	324.3
32.5°	1583.7	1399.3	625.0	341.7	317.5	311.5	304.7	303.4	303.4	306.1	308.1
35°	1651.0	1438.4	581.9	353.2	313.5	296.7	286.0	279.8	280.5	284.5	286.6
37.5°	1731.7	1485.4	550.3	363.3	310.8	279.8	262.4	255.0	250.3	255.0	253.6
40°	1837.3	1554.7	527.5	371.4	307.5	260.3	236.8	224.7	216.0	218.6	217.3
42.5°	1992.7	1663.8	518.8	372.1	300.0	237.5	210.5	194.4	181.6	182.3	179.6
45°	2210.7	1836.0	563.8	363.3	283.9	212.6	183.0	161.4	153.3	151.4	148.7
47.5°	2509.4	2086.9	668.1	345.1	260.3	188.4	156.1	138.0	131.8	128.5	126.5
50°	2909.7	2409.2	783.8	324.9	236.8	165.5	133.9	122.5	118.4	115.0	114.4
52.5°	3373.9	2736.1	878.6	304.7	213.3	145.3	119.7	113.1	109.7	107.0	106.3
55°	3799.8	2961.5	873.3	283.2	190.3	129.1	109.7	105.6	101.6	98.9	97.6
57.5°	4064.8	2993.1	719.9	259.7	164.2	116.3	100.2	97.6	92.9	89.5	88.8
60°	4186.6	2812.8	504.6	228.8	138.0	104.2	90.2	88.8	82.7	78.0	76.7
62.5°	4208.9	2477.8	336.4	190.3	115.0	92.9	80.1	78.0	70.0	61.9	57.8
65°	4118.7	1998.7	232.8	148.7	98.2	80.8	68.6	64.6	55.9	47.8	45.1
67.5°	3833.4	1403.4	162.2	107.0	83.4	64.0	54.5	53.2	46.4	39.7	37.7
70°	3310.6	799.9	108.3	80.1	65.9	43.8	43.0	44.4	37.7	32.3	29.6
72.5°	2538.3	366.0	67.2	58.5	45.1	29.6	34.3	35.0	28.9	24.2	21.5
75°	1494.2	156.7	42.4	37.7	22.9	19.5	24.9	25.5	19.5	15.5	13.4
77.5°	508.6	59.2	27.0	22.2	11.5	10.8	16.2	16.2	10.8	6.0	4.7
80°	115.7	22.2	13.4	8.7	5.4	4.7	5.4	4.7	2.7	0.7	0.0
82.5°	33.0	8.7	5.4	3.4	2.0	2.0	0.7	0.0	0.0	0.0	0.0
85°	9.4	4.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)