

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: P881779

Luminaire Tested: **NAV-SB1B-830-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4935 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

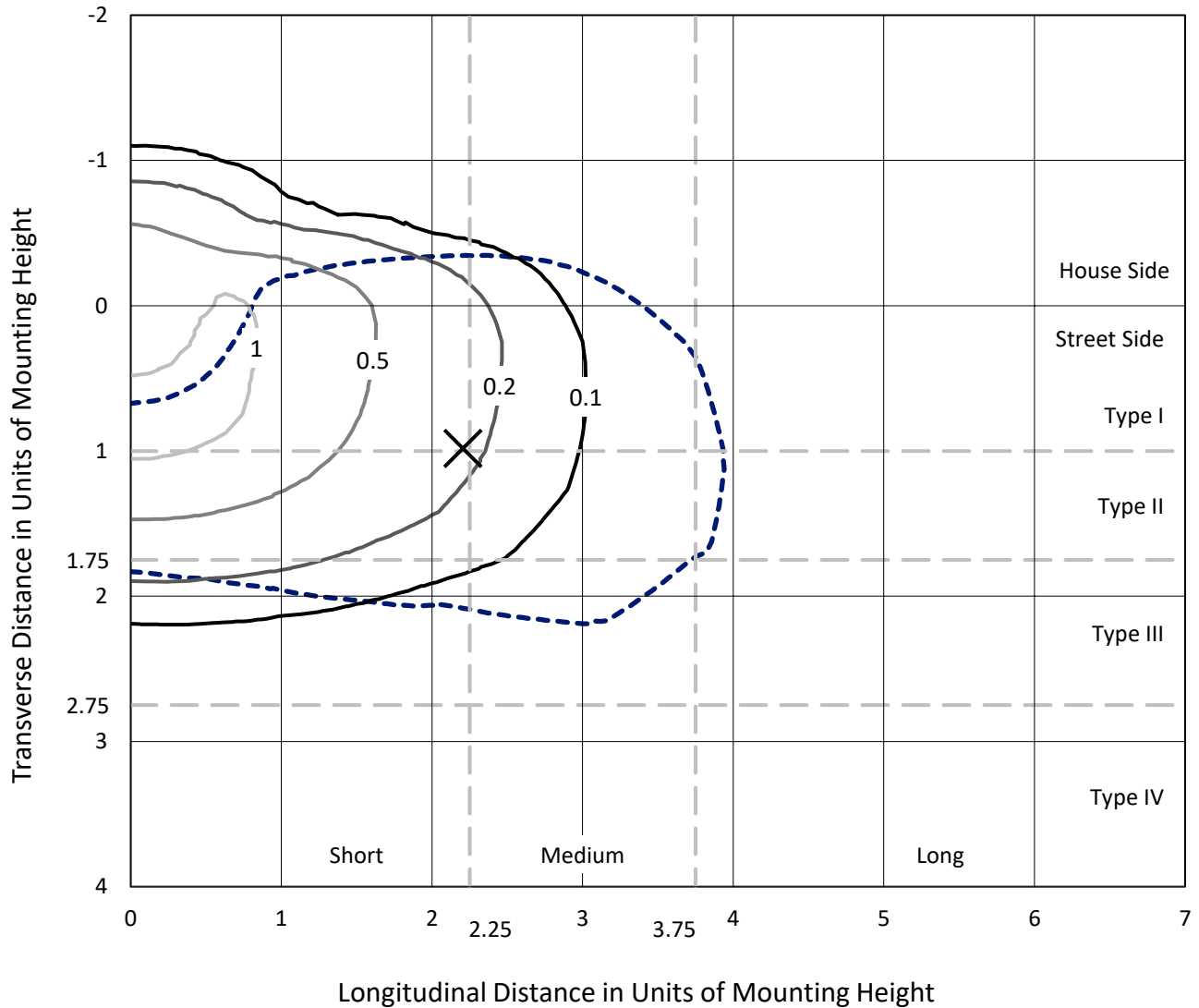
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881779
 CATALOG NUMBER: NAV-SB1B-830-U-T3

Iso-Footcandle Lines of Horizontal Illumination

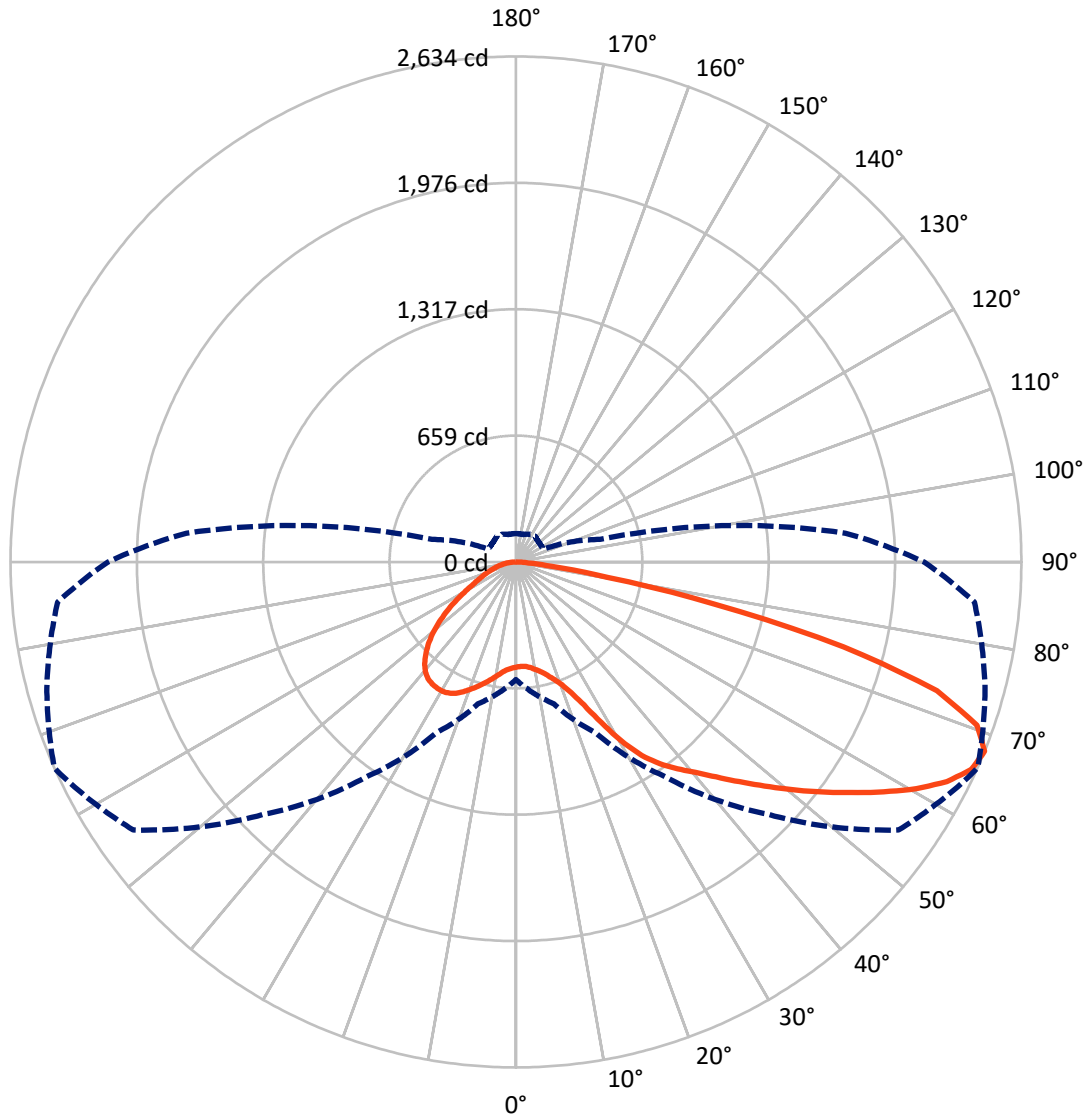
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Short - N/A

REPORT NUMBER: P881779
CATALOG NUMBER: NAV-SB1B-830-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P881779
 CATALOG NUMBER: NAV-SB1B-830-U-T3

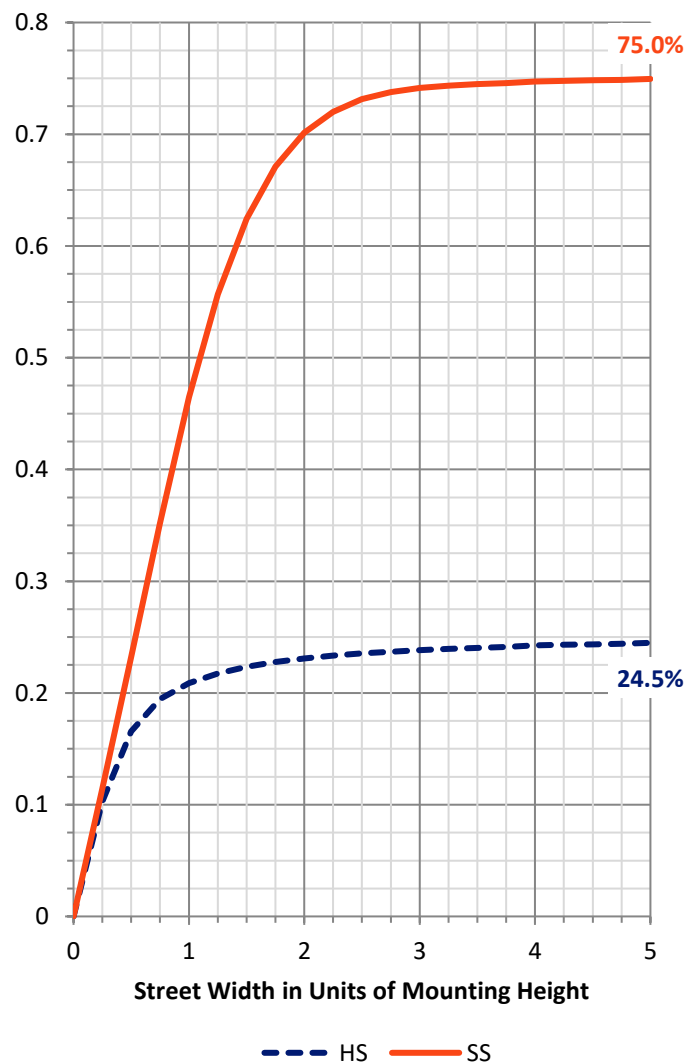
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1227.1	0.0	1227.1
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3707.9	0.0	3707.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	4935.0	0.0	4935.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.3	1.1
10°-20°	179.3	3.6
20°-30°	345.6	7.0
30°-40°	605.9	12.3
40°-50°	900.8	18.3
50°-60°	1141.9	23.1
60°-70°	1117.3	22.6
70°-80°	533.0	10.8
80°-90°	57.0	1.2
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°	4935.0	100.0
0°-180°	4935.0	100.0

Coefficient of Utilization



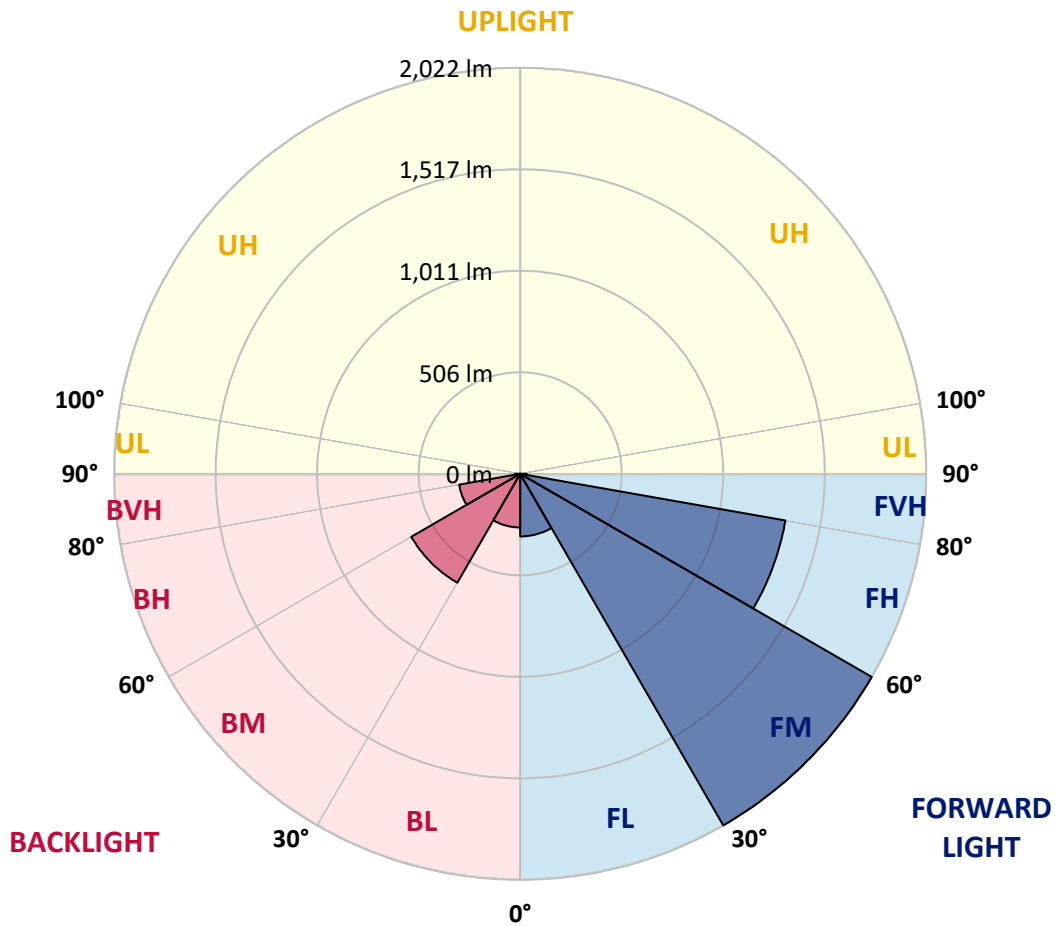
REPORT NUMBER: P881779
 CATALOG NUMBER: NAV-SB1B-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	311.8	6.3			
FM (30°-60°)	2022.3	41.0			
FH (60°-80°)	1341.5	27.2			G1/1800
FVH (80°-90°)	32.3	0.7			G1/100
BL (0°-30°)	267.3	5.4	B1/500		
BM (30°-60°)	626.3	12.7	B1/1000		
BH (60°-80°)	308.8	6.3	B1/500		G1/500
BVH (80°-90°)	24.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



REPORT NUMBER: P881779

CATALOG NUMBER: NAV-SB1B-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4
2.5°	541.7	544.8	544.0	542.7	542.4	542.9	543.7	544.5	544.2	545.5	547.6
5°	540.1	543.2	542.9	542.9	544.0	546.1	547.4	548.7	547.4	548.9	551.8
7.5°	541.1	543.5	544.5	545.5	548.1	552.0	555.1	558.0	556.4	558.2	561.9
10°	554.4	556.2	557.2	557.2	559.0	563.4	566.5	571.7	570.4	573.3	578.0
12.5°	578.5	580.3	580.3	579.2	580.5	583.4	584.4	590.1	587.8	592.5	597.1
15°	608.0	611.7	608.8	607.0	607.5	610.4	610.1	614.5	612.2	616.1	620.2
17.5°	640.7	645.4	640.7	640.4	639.4	642.5	642.8	646.7	642.5	645.4	648.2
20°	679.3	685.8	681.9	683.2	680.9	682.2	683.5	689.2	682.7	684.8	684.0
22.5°	733.8	741.6	737.4	742.3	740.8	739.7	739.5	749.6	739.5	740.3	732.7
25°	813.1	822.5	815.2	821.9	821.9	825.3	829.2	842.2	825.3	820.4	800.9
27.5°	930.3	939.7	925.4	929.5	928.3	936.5	932.4	964.6	946.4	938.4	899.2
30°	1071.4	1088.0	1061.0	1060.0	1058.7	1071.9	1077.9	1099.1	1080.7	1072.7	1025.5
32.5°	1223.8	1241.2	1209.1	1199.7	1194.8	1202.8	1197.9	1215.0	1202.3	1189.9	1131.5
35°	1385.1	1402.2	1371.6	1353.5	1333.8	1316.9	1299.3	1303.7	1291.8	1272.8	1212.4
37.5°	1537.6	1569.0	1536.5	1517.1	1480.8	1447.9	1398.6	1378.1	1367.0	1349.6	1288.7
40°	1692.9	1710.8	1686.1	1669.6	1630.1	1578.5	1499.7	1456.4	1441.4	1424.5	1372.9
42.5°	1807.2	1824.3	1811.1	1799.7	1768.9	1709.0	1607.1	1552.9	1531.1	1512.2	1468.3
45°	1898.0	1910.7	1902.4	1906.5	1893.3	1835.2	1718.3	1656.3	1633.8	1610.7	1576.2
47.5°	1934.5	1948.0	1961.3	1985.9	2008.4	1965.7	1837.8	1768.3	1744.5	1720.9	1686.9
50°	1930.4	1944.1	1982.5	2034.9	2104.9	2090.6	1963.8	1887.6	1865.6	1838.6	1807.2
52.5°	1897.2	1912.8	1962.0	2049.2	2160.6	2184.2	2092.2	2010.8	1990.0	1957.9	1926.5
55°	1810.1	1819.4	1893.3	2016.7	2173.9	2249.6	2217.9	2142.0	2121.2	2076.4	2042.2
57.5°	1648.6	1662.0	1769.6	1929.4	2140.7	2293.9	2328.4	2279.9	2260.0	2195.4	2159.6
60°	1437.8	1459.3	1582.4	1782.6	2056.2	2293.7	2428.7	2415.5	2398.9	2312.6	2275.3
62.5°	1199.2	1224.1	1342.6	1575.2	1908.4	2228.6	2491.5	2529.1	2520.5	2420.7	2373.0
65°	921.0	938.1	1056.1	1306.8	1678.4	2088.8	2498.8	2606.6	2608.2	2502.9	2424.1
67.5°	613.2	662.5	764.9	980.6	1370.3	1860.4	2435.0	2619.3	2634.4	2531.2	2398.4
70°	299.2	364.0	464.4	637.3	980.6	1510.1	2268.3	2515.1	2548.5	2448.7	2245.4
72.5°	124.2	145.2	199.9	314.5	562.9	1019.0	1933.3	2232.5	2294.4	2169.7	1887.9
75°	83.7	90.8	114.3	161.3	256.4	502.5	1394.2	1664.6	1764.5	1638.7	1339.5
77.5°	64.6	69.0	83.2	112.8	152.5	190.1	746.2	1003.2	1054.8	976.5	697.0
80°	50.8	54.2	62.2	82.2	108.1	101.6	254.4	454.5	484.3	406.3	224.0
82.5°	44.1	45.4	44.6	55.7	71.8	59.4	83.5	167.8	185.1	134.3	73.1
85°	31.9	35.5	37.1	34.5	38.1	30.1	34.2	59.4	65.3	58.3	41.2
87.5°	13.0	19.2	23.6	22.3	14.0	8.6	10.6	17.4	20.0	21.8	13.5
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: P881779
 CATALOG NUMBER: NAV-SB1B-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4
2.5°	547.9	549.7	551.0	552.5	553.6	555.1	558.2	560.1	560.3	561.6	561.4
5°	552.8	555.4	558.2	562.4	567.1	571.0	576.9	581.1	582.6	583.9	583.7
7.5°	563.4	567.1	572.2	579.5	586.2	591.4	598.7	603.6	608.5	610.4	610.6
10°	579.2	584.4	592.0	601.8	609.1	615.8	623.3	627.5	632.4	634.5	635.5
12.5°	599.0	604.4	614.3	628.0	634.7	639.4	642.0	641.0	642.0	643.8	644.3
15°	621.5	627.5	638.6	653.4	658.1	653.9	648.2	643.0	642.3	642.8	644.6
17.5°	648.2	652.6	665.6	678.0	674.7	657.6	645.1	636.8	632.7	631.4	633.2
20°	685.6	685.6	696.2	704.0	681.4	652.4	632.9	619.4	610.9	607.3	606.5
22.5°	730.9	726.8	733.5	728.1	680.1	637.8	610.9	587.5	574.6	569.4	568.6
25°	788.5	783.6	781.8	748.0	670.8	614.8	571.0	542.7	531.3	528.4	528.9
27.5°	875.4	862.9	839.3	758.9	653.7	578.5	524.3	498.1	491.6	491.9	492.6
30°	991.0	966.1	908.3	760.8	625.7	527.1	476.6	457.9	454.8	456.1	460.5
32.5°	1098.1	1074.5	978.8	752.5	582.6	476.8	433.8	421.3	416.7	418.2	420.3
35°	1182.1	1175.6	1044.2	740.8	529.7	429.6	395.4	384.8	375.7	373.6	375.2
37.5°	1261.4	1258.8	1093.2	724.5	477.3	396.2	364.6	350.6	337.3	330.1	330.3
40°	1348.6	1346.0	1125.3	699.3	430.9	367.2	336.8	318.4	302.1	288.8	290.1
42.5°	1446.6	1431.3	1140.6	663.3	391.5	342.5	314.3	289.4	267.8	255.7	256.4
45°	1553.7	1519.2	1140.3	617.4	358.3	320.0	290.1	254.9	234.9	223.5	223.0
47.5°	1667.2	1603.2	1126.3	566.5	326.2	295.1	252.8	225.8	212.6	205.6	204.1
50°	1784.4	1681.7	1102.5	508.2	293.3	266.8	229.5	211.1	200.9	194.5	192.1
52.5°	1894.6	1753.0	1073.7	442.1	259.8	239.3	219.1	204.8	194.2	186.9	183.8
55°	1997.0	1814.5	1033.0	374.4	232.6	220.9	214.2	202.2	190.1	181.5	178.1
57.5°	2088.0	1854.4	962.7	310.9	213.1	208.2	209.0	197.8	183.8	176.6	171.9
60°	2163.8	1883.7	858.8	252.0	197.3	195.8	200.9	189.5	173.2	164.9	161.3
62.5°	2209.1	1883.2	731.2	206.4	183.8	184.4	190.3	179.2	162.6	154.8	152.5
65°	2205.2	1837.1	591.2	176.6	170.9	171.4	179.2	167.8	153.8	149.1	148.8
67.5°	2127.2	1724.5	453.5	157.1	156.6	158.9	168.0	160.0	148.3	147.8	148.6
70°	1915.9	1490.9	326.7	141.6	141.8	145.2	157.1	155.1	145.5	146.5	146.2
72.5°	1536.3	1136.7	219.4	125.2	125.5	130.9	146.8	151.2	142.6	156.4	158.4
75°	1023.1	708.9	141.1	107.9	108.1	115.1	137.7	143.6	134.8	155.8	157.1
77.5°	491.6	318.7	102.2	90.8	90.8	97.2	119.0	128.6	114.9	121.1	111.0
80°	169.8	119.8	80.4	73.1	71.6	76.0	100.3	111.5	99.0	91.3	85.6
82.5°	66.9	62.2	64.6	56.8	51.6	54.5	78.0	92.0	72.9	65.9	65.6
85°	38.4	40.4	45.6	37.6	29.8	33.4	57.3	66.1	55.0	48.5	49.5
87.5°	10.4	14.3	21.0	19.4	13.5	14.3	27.2	36.6	31.6	24.4	25.2
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)