

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: P959465

Luminaire Tested: **NAV-SB1A-830-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959465
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4124.6 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 30.9
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

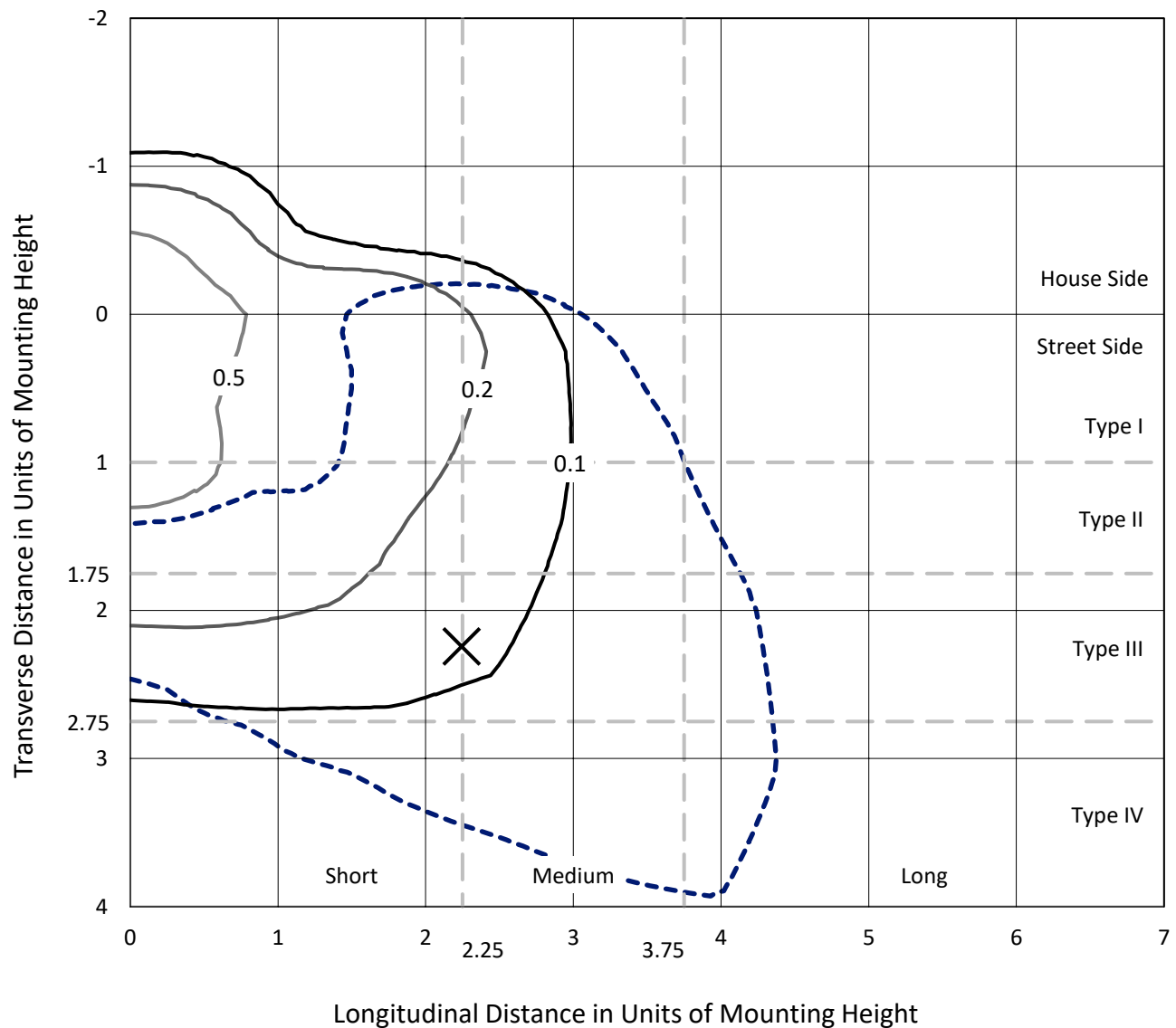


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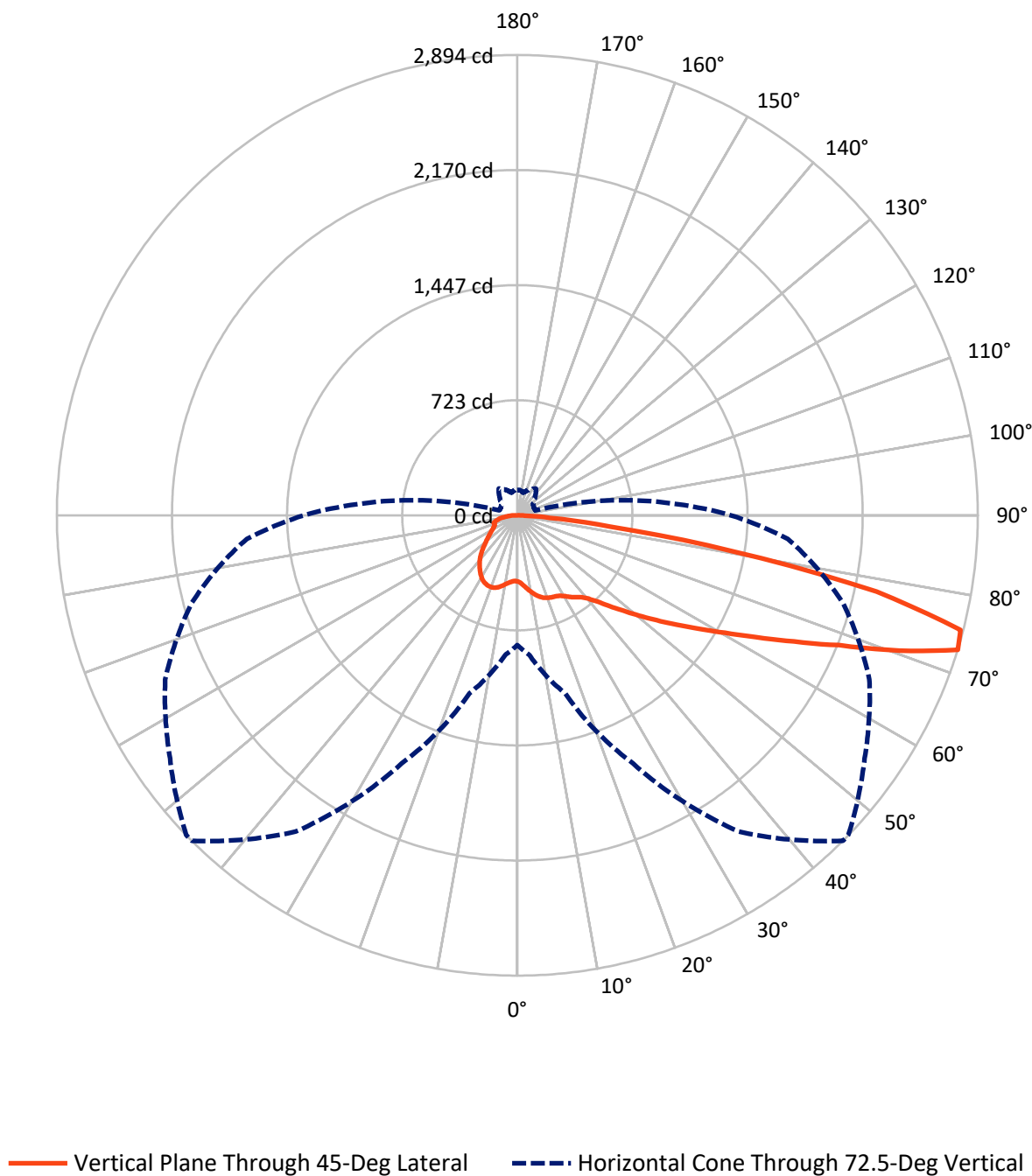
Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd



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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	932.4	0.0	932.4
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	3192.2	0.0	3192.2
	% Fixture	77.4	0.0	77.4
Total	Lumens	4124.6	0.0	4124.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.4	1.0
10°-20°	141.2	3.4
20°-30°	245.6	6.0
30°-40°	352.1	8.5
40°-50°	495.8	12.0
50°-60°	759.4	18.4
60°-70°	1100.1	26.7
70°-80°	878.5	21.3
80°-90°	109.4	2.7
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°	4124.6	100.0
0°-180°	4124.6	100.0

Coefficient of Utilization



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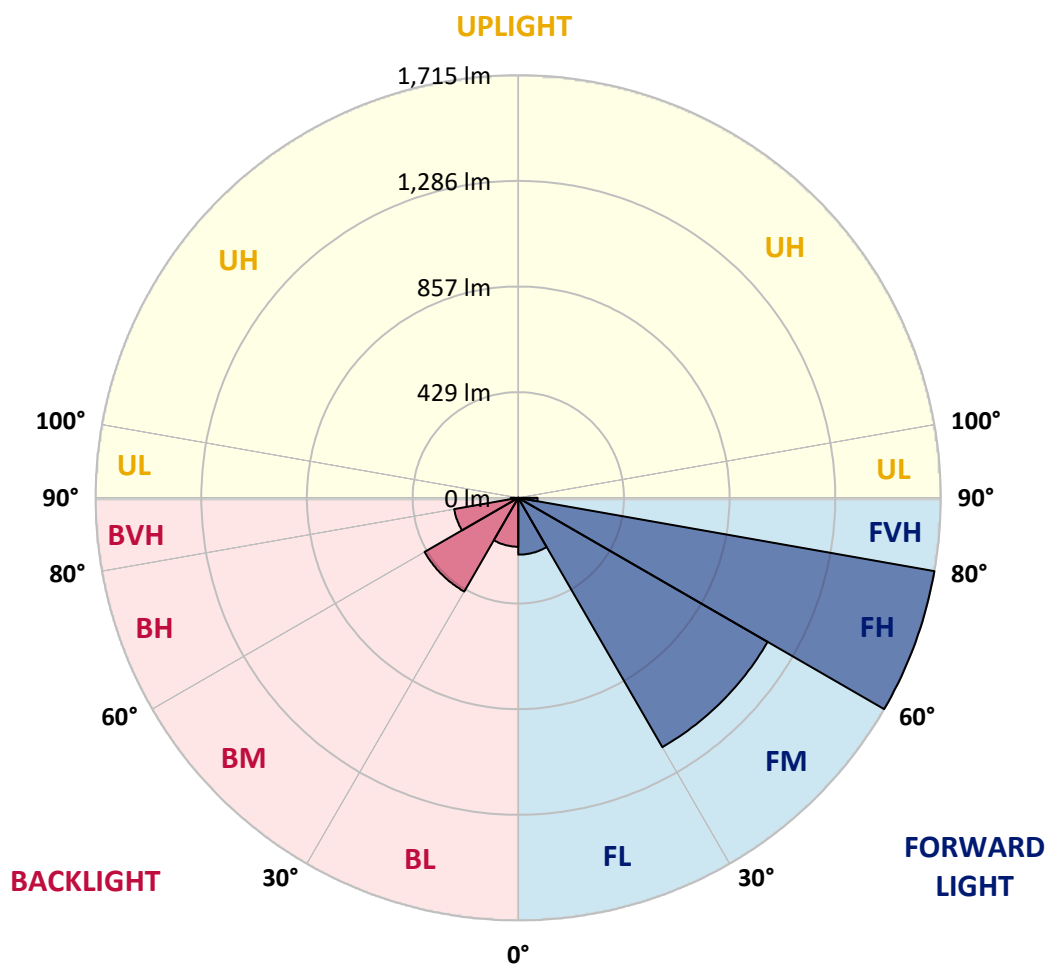
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	230.7	5.6			
FM	(30°-60°)	1168.3	28.3			
FH	(60°-80°)	1714.7	41.6			G1/1800
FVH	(80°-90°)	78.5	1.9			G1/100
BL	(0°-30°)	198.5	4.8	B1/500		
BM	(30°-60°)	439.0	10.6	B1/1000		
BH	(60°-80°)	264.0	6.4	B1/500		G1/500
BVH	(80°-90°)	30.9	0.7			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	416.0	416.0	416.0	416.0	416.0	416.0	416.0	416.0	416.0	416.0	416.0
2.5°	432.3	435.2	432.7	430.2	429.2	426.3	426.1	424.4	423.2	420.2	419.3
5°	462.6	466.3	462.0	457.2	452.8	445.9	445.0	440.0	434.3	427.8	424.1
7.5°	496.7	500.0	495.0	487.8	480.2	468.6	468.4	459.3	450.4	439.3	433.1
10°	526.4	530.8	524.1	514.3	504.7	491.7	490.2	479.8	468.4	454.1	444.5
12.5°	552.8	555.8	549.3	537.3	526.2	513.2	511.3	499.8	487.2	470.9	458.7
15°	573.6	577.5	568.9	556.1	544.3	531.5	529.7	519.3	506.7	489.5	473.9
17.5°	587.3	590.6	581.7	567.3	556.1	545.4	544.1	535.4	524.3	507.0	490.2
20°	592.6	596.0	586.6	572.1	561.7	553.4	552.8	546.4	538.8	523.0	506.0
22.5°	597.8	601.0	588.9	573.6	564.5	559.2	559.0	554.9	551.9	538.8	522.3
25°	618.8	619.7	603.4	581.5	568.4	563.9	563.6	563.4	564.7	554.5	540.0
27.5°	637.0	636.8	622.9	602.3	582.1	572.6	572.4	574.5	578.6	570.1	558.2
30°	663.8	661.4	644.9	623.4	605.0	590.1	588.9	586.9	590.1	583.4	576.5
32.5°	720.5	712.9	686.1	647.9	623.8	612.5	610.8	598.6	599.9	595.8	592.3
35°	801.8	791.8	756.1	694.4	647.3	631.2	630.4	614.9	612.3	608.6	609.9
37.5°	898.4	886.1	844.6	761.8	687.7	652.9	651.6	637.8	627.1	623.2	630.6
40°	995.6	979.9	945.6	843.9	747.2	689.2	685.1	664.0	651.8	645.3	660.9
42.5°	1089.9	1076.9	1047.6	936.0	820.7	742.2	733.1	697.0	687.9	681.8	710.1
45°	1173.3	1161.5	1140.1	1034.4	906.7	814.4	805.4	746.6	743.7	743.7	784.6
47.5°	1241.1	1238.5	1215.6	1134.9	1008.2	896.5	881.1	815.5	823.1	834.8	890.4
50°	1316.3	1309.1	1284.7	1233.7	1127.5	990.6	978.0	900.0	928.4	960.6	1043.3
52.5°	1385.4	1389.3	1362.1	1336.7	1262.2	1095.5	1073.4	999.7	1061.2	1114.4	1222.6
55°	1456.4	1456.6	1449.0	1445.6	1403.4	1211.6	1187.3	1119.6	1217.4	1283.5	1431.6
57.5°	1523.1	1523.6	1534.8	1565.5	1567.2	1345.4	1317.8	1267.0	1391.0	1458.4	1647.2
60°	1582.7	1585.7	1616.5	1688.3	1711.3	1498.8	1472.7	1441.0	1570.5	1638.3	1873.8
62.5°	1602.7	1613.8	1682.4	1784.3	1853.6	1686.9	1661.3	1642.5	1759.1	1822.1	2063.3
65°	1568.8	1594.2	1726.9	1863.7	2000.1	1910.5	1885.1	1864.5	1955.1	2014.4	2218.8
67.5°	1485.5	1518.3	1724.4	1946.8	2177.8	2179.6	2155.9	2107.4	2165.2	2188.0	2269.5
70°	1266.3	1315.4	1572.5	1977.9	2381.8	2547.4	2524.6	2399.8	2374.9	2264.5	2127.0
72.5°	815.9	881.9	1157.8	1722.2	2427.2	2893.5	2892.2	2663.9	2441.1	2115.9	1705.9
75°	297.7	338.0	538.0	1081.0	2037.4	2875.9	2884.4	2618.7	2228.5	1634.4	1062.7
77.5°	108.4	118.6	175.6	415.4	1253.1	2307.5	2325.1	2093.5	1586.2	820.2	421.1
80°	56.9	62.6	90.0	161.2	536.9	1370.4	1398.0	1244.1	745.5	247.0	126.3
82.5°	31.5	34.1	50.4	87.5	241.8	586.0	602.5	491.5	262.3	104.8	52.2
85°	16.9	18.0	23.7	47.8	118.2	203.2	207.8	146.9	104.6	61.5	25.2
87.5°	5.0	6.0	7.8	15.2	46.3	45.6	46.7	29.1	41.3	31.1	8.3
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°	416.0	416.0	416.0	416.0	416.0	416.0	416.0	416.0	416.0	416.0	416.0
2.5°	418.1	417.4	415.0	413.9	412.7	412.4	413.5	413.7	413.9	414.1	415.0
5°	422.0	419.7	417.6	416.4	416.8	417.0	419.1	420.7	421.8	422.6	423.0
7.5°	429.6	427.8	424.1	423.9	424.6	426.5	429.4	432.9	434.8	436.3	436.8
10°	440.9	437.6	433.3	433.9	435.2	438.1	443.9	446.7	450.0	452.8	452.1
12.5°	452.3	449.6	444.5	445.0	447.2	452.1	457.8	461.2	463.5	465.7	466.5
15°	467.4	462.4	456.9	456.9	460.8	466.3	468.9	471.7	473.0	475.4	476.3
17.5°	482.8	476.3	469.1	468.6	473.4	476.0	477.5	478.1	478.5	481.0	482.0
20°	498.3	491.1	480.8	480.0	481.0	480.6	480.4	480.0	480.6	483.9	485.2
22.5°	513.4	505.2	491.1	487.2	484.1	480.0	479.8	479.5	480.0	483.2	485.4
25°	531.3	521.2	502.4	490.7	480.4	474.8	475.4	475.6	476.0	478.7	482.2
27.5°	550.6	539.5	512.8	489.5	471.1	467.2	466.1	466.7	468.2	472.3	476.5
30°	569.9	556.9	522.3	485.2	459.3	453.9	450.4	451.9	456.7	460.8	465.5
32.5°	587.5	574.5	529.9	475.6	444.3	435.8	431.3	433.3	438.1	439.5	445.0
35°	608.1	593.4	533.2	460.4	428.0	415.0	408.9	406.1	408.5	406.9	411.7
37.5°	631.2	615.8	532.8	440.4	408.9	393.9	385.5	374.8	369.8	364.6	367.9
40°	665.3	643.2	527.6	416.4	385.2	371.6	356.3	338.4	327.0	316.8	317.4
42.5°	711.8	681.2	518.0	389.8	358.5	345.7	325.0	304.0	286.2	269.2	267.7
45°	781.2	730.9	506.0	361.5	329.6	317.0	294.6	270.9	250.7	229.0	226.4
47.5°	881.1	797.9	494.8	329.4	299.2	287.7	267.4	245.5	221.6	200.6	198.1
50°	1018.4	893.9	484.3	298.1	269.2	260.6	244.5	222.0	197.9	181.0	179.9
52.5°	1193.1	1024.5	480.0	267.9	241.2	237.9	225.1	204.3	181.4	167.1	166.0
55°	1393.6	1180.7	480.0	239.0	216.6	217.7	208.8	189.4	169.7	156.9	155.6
57.5°	1598.3	1338.9	471.3	212.3	195.8	200.3	194.6	177.7	159.9	146.7	144.5
60°	1786.9	1471.4	436.0	188.0	177.3	184.5	180.8	166.3	144.5	133.5	131.7
62.5°	1931.8	1546.2	368.3	168.6	162.1	170.4	168.4	151.0	141.7	137.1	135.6
65°	2004.4	1534.0	281.6	151.5	149.2	162.1	158.0	157.3	150.0	144.7	143.0
67.5°	1959.9	1429.3	204.3	138.9	141.9	154.5	170.4	172.9	159.3	149.0	147.3
70°	1764.5	1239.8	152.1	126.9	132.5	154.7	194.2	181.0	156.2	144.3	142.3
72.5°	1342.3	924.6	118.0	114.3	120.3	155.8	204.9	177.3	147.5	159.5	158.2
75°	767.6	507.6	94.7	98.9	105.2	145.5	199.5	167.7	140.8	146.5	146.5
77.5°	292.6	195.2	78.2	83.6	84.6	127.1	190.8	167.1	134.1	130.8	119.3
80°	101.5	76.3	64.8	66.5	65.4	113.0	183.0	145.3	109.8	98.2	94.9
82.5°	41.5	38.0	51.2	49.1	46.5	87.7	147.7	118.9	89.7	79.3	78.4
85°	18.0	24.1	33.9	29.7	27.0	60.9	118.4	100.6	75.8	65.4	65.2
87.5°	3.7	9.1	14.3	13.4	13.9	40.6	84.0	71.4	53.7	40.2	31.5
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)