

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: McGRAW-EDISON

Report Number: P300419

Luminaire Tested: **GLNA-AF-01-LED-E1-AFL-7050-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300419  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-01-LED-E1-AFL-7050-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

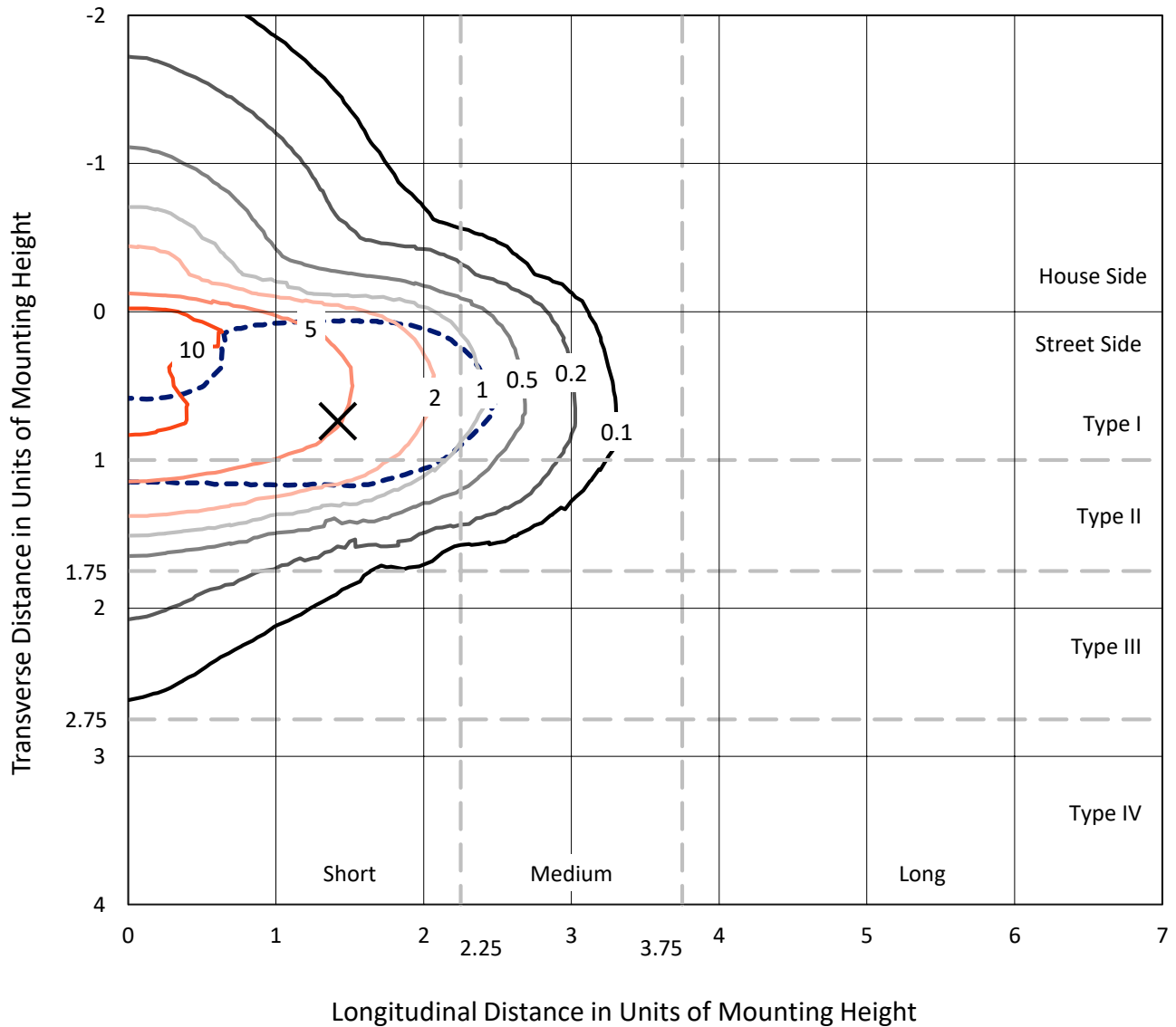
Lumens per Lamp: N/A  
Luminaire Lumens: 4197.7 lumens  
Efficiency: N/A  
Efficacy: 123.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (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

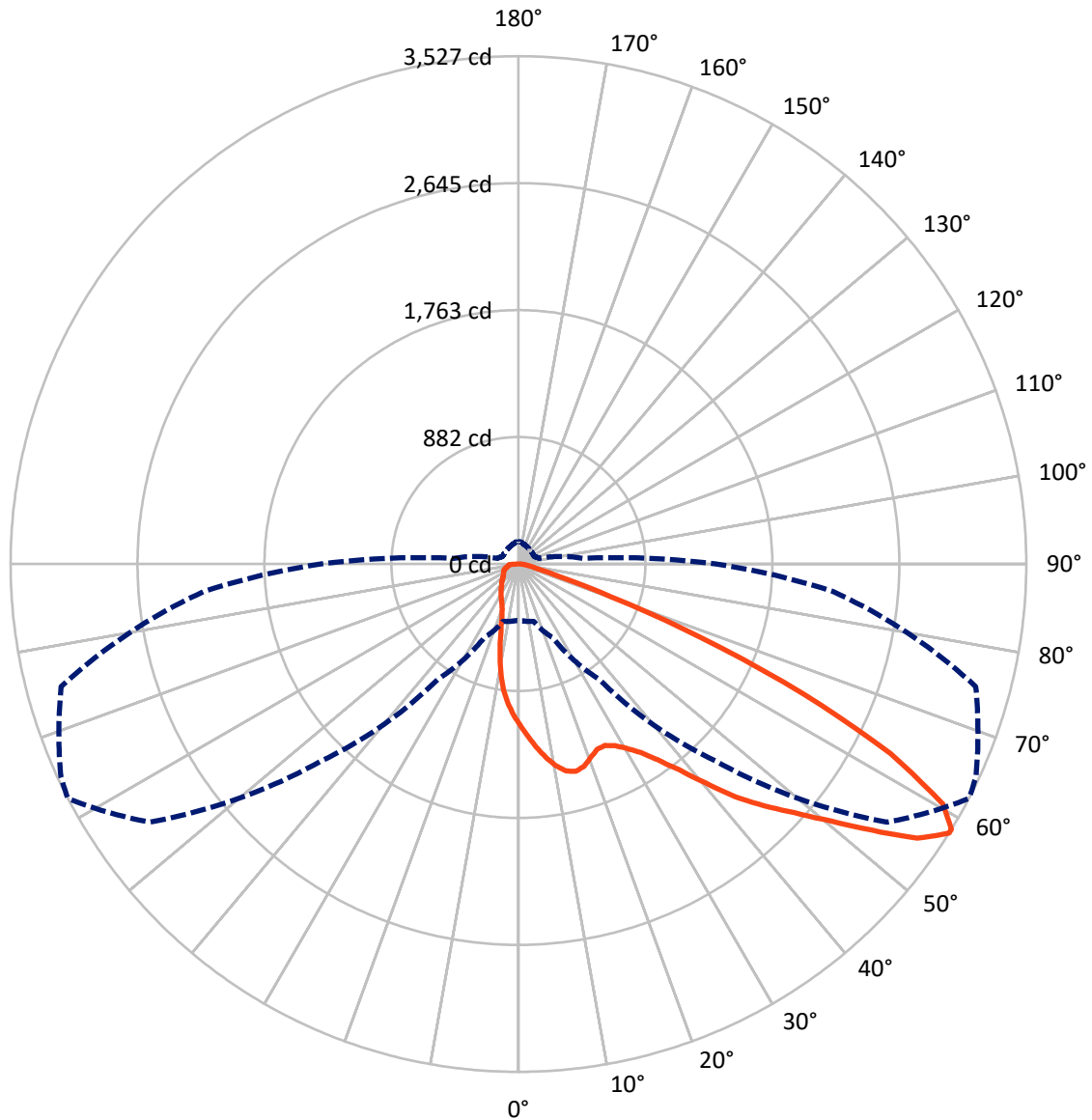
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.6 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	640.2	0.0	640.2
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	3557.5	0.0	3557.5
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	4197.7	0.0	4197.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.7	2.4
10°-20°	254.9	6.1
20°-30°	412.1	9.8
30°-40°	654.2	15.6
40°-50°	957.2	22.8
50°-60°	1001.1	23.8
60°-70°	591.5	14.1
70°-80°	166.6	4.0
80°-90°	60.5	1.4
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°	4197.7	100.0
0°-180°	4197.7	100.0



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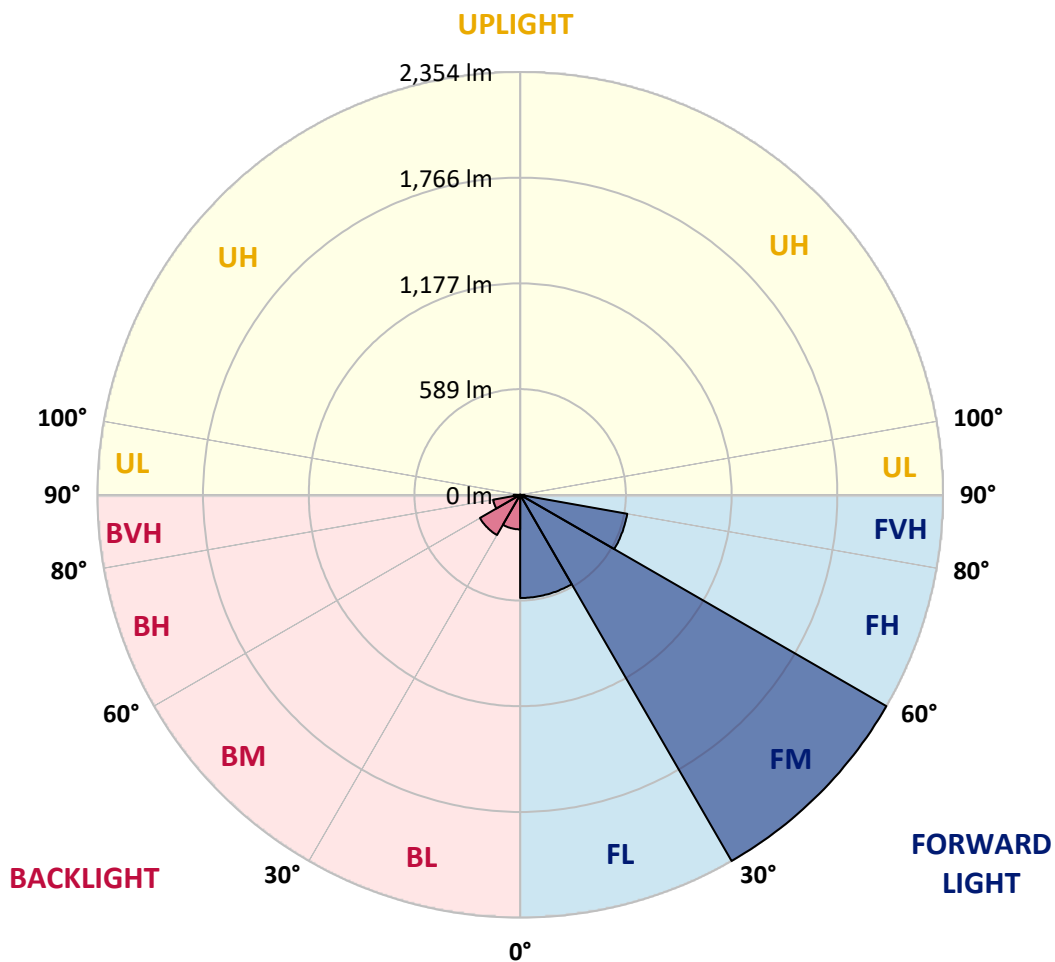
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	574.3	13.7			
FM	(30°-60°)	2354.0	56.1			
FH	(60°-80°)	605.3	14.4			G0/660
FVH	(80°-90°)	23.9	0.6			G1/100
BL	(0°-30°)	192.4	4.6	B1/500		
BM	(30°-60°)	258.4	6.2	B1/1000		
BH	(60°-80°)	152.8	3.6	B1/500		G1/500
BVH	(80°-90°)	36.6	0.9			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0
2.5°	1274.1	1263.9	1257.3	1251.6	1244.1	1228.1	1206.5	1192.9	1186.0	1162.5	1134.6
5°	1399.1	1390.0	1383.3	1375.6	1362.1	1337.0	1302.2	1274.5	1260.9	1213.9	1158.1
7.5°	1369.8	1373.6	1385.2	1405.6	1423.0	1419.6	1388.6	1353.4	1335.4	1270.0	1185.4
10°	1193.5	1200.0	1220.2	1267.8	1344.9	1424.0	1448.1	1423.8	1405.6	1325.5	1213.5
12.5°	1158.1	1157.9	1159.5	1172.2	1218.0	1329.3	1450.1	1474.6	1463.7	1378.5	1242.1
15°	1172.5	1172.9	1171.8	1177.1	1191.3	1235.4	1389.6	1494.2	1501.9	1431.9	1271.8
17.5°	1210.5	1209.5	1205.0	1205.0	1210.1	1227.3	1318.4	1476.0	1511.5	1479.1	1297.9
20°	1274.1	1269.6	1257.5	1246.5	1240.9	1250.2	1289.2	1434.1	1494.7	1520.4	1319.4
22.5°	1351.2	1347.7	1328.1	1304.4	1285.2	1285.0	1304.2	1397.5	1465.7	1559.4	1337.6
25°	1450.9	1445.1	1416.1	1378.1	1344.5	1331.7	1337.0	1395.7	1449.9	1601.7	1353.8
27.5°	1567.9	1557.4	1523.0	1468.3	1418.8	1392.9	1385.2	1427.9	1464.3	1654.1	1376.3
30°	1709.8	1697.7	1653.7	1582.3	1512.5	1470.0	1453.6	1485.1	1512.1	1717.9	1412.5
32.5°	1871.3	1853.9	1802.9	1724.2	1632.5	1567.7	1541.0	1560.6	1582.1	1794.8	1457.8
35°	2094.5	2073.7	2000.0	1891.5	1787.9	1698.7	1656.0	1670.3	1691.2	1909.4	1523.2
37.5°	2246.7	2237.4	2188.3	2086.4	1973.7	1871.1	1805.1	1813.4	1825.2	2052.8	1607.0
40°	2245.3	2249.0	2250.0	2251.0	2174.3	2076.1	2005.1	1996.4	1994.0	2210.1	1702.3
42.5°	2132.8	2148.2	2198.0	2299.0	2345.7	2300.6	2235.6	2210.5	2198.0	2395.5	1803.3
45°	1960.6	1968.9	2062.2	2259.5	2433.5	2523.0	2473.8	2394.7	2372.2	2565.9	1887.1
47.5°	1871.9	1881.0	1939.7	2154.7	2432.5	2702.7	2731.1	2580.5	2540.2	2714.1	1959.5
50°	1660.6	1679.6	1753.5	1972.5	2343.7	2785.3	3000.2	2801.9	2718.5	2858.4	2032.0
52.5°	1272.6	1301.8	1384.6	1672.8	2118.6	2744.4	3215.4	3070.3	2952.5	3007.9	2094.3
55°	802.7	824.5	894.0	1181.4	1694.8	2531.5	3297.1	3360.7	3255.9	3149.4	2148.2
57.5°	436.4	446.1	472.2	652.3	1102.4	2060.9	3178.1	3525.9	3482.5	3269.6	2188.9
58°	390.6	397.1	413.3	565.3	977.7	1932.2	3125.3	3526.5	3504.8	3287.2	2192.1
60°	289.8	286.4	272.0	322.6	544.2	1334.8	2806.3	3385.4	3449.3	3308.7	2176.7
62.5°	254.6	246.5	217.0	213.7	264.7	614.9	2147.2	2899.9	3050.8	3185.8	2083.0
65°	239.2	230.5	192.5	180.3	190.9	260.1	1264.9	2174.9	2364.1	2813.0	1843.4
67.5°	227.7	216.4	176.9	160.1	160.9	172.0	507.0	1369.8	1582.7	2135.8	1433.9
70°	216.6	204.4	163.7	144.3	139.7	136.0	201.6	685.7	878.8	1349.1	914.2
72.5°	204.8	192.7	152.0	131.8	122.9	110.5	131.6	280.5	391.8	638.3	414.7
75°	187.6	176.7	140.3	120.8	108.1	91.5	99.4	146.5	175.7	254.2	199.8
77.5°	166.4	157.5	127.3	111.7	95.9	74.3	76.5	101.6	112.7	145.5	118.8
80°	119.6	122.8	113.3	100.4	85.4	60.3	58.7	74.1	80.1	93.5	77.3
82.5°	84.0	85.8	93.7	82.0	70.6	47.4	43.3	52.2	55.7	61.5	41.7
85°	57.9	55.9	64.2	57.1	51.0	31.6	29.6	35.4	37.6	38.1	21.5
87.5°	34.8	34.8	37.2	30.6	27.5	16.4	16.0	20.2	21.5	20.6	11.9
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°	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0	1115.0
2.5°	1118.0	1104.0	1074.1	1050.2	1020.0	988.5	970.9	952.2	939.3	930.0	944.8
5°	1126.5	1097.8	1036.2	977.7	913.0	845.8	794.8	747.4	714.4	693.8	713.2
7.5°	1139.9	1095.9	997.6	897.6	781.6	669.7	569.7	507.0	470.4	452.5	463.7
10°	1155.4	1092.7	952.4	789.1	623.0	482.1	407.4	382.1	373.8	370.4	372.0
12.5°	1168.2	1086.0	896.8	657.8	467.9	380.7	359.2	358.6	360.3	360.7	361.3
15°	1177.3	1076.1	814.4	521.0	374.2	346.9	345.7	349.3	352.6	354.0	354.8
17.5°	1183.4	1055.7	721.3	411.9	335.2	330.5	333.3	337.8	341.4	342.4	343.1
20°	1182.8	1025.9	610.4	343.5	314.1	314.1	318.8	322.4	322.6	321.4	322.0
22.5°	1176.7	985.0	502.9	307.2	295.3	298.7	303.4	300.1	286.2	277.1	277.7
25°	1166.4	936.1	410.7	284.0	277.9	283.8	282.5	257.2	237.4	228.5	228.5
27.5°	1157.3	878.4	340.0	263.9	260.5	267.8	243.3	220.4	212.1	207.9	206.6
30°	1150.8	816.2	292.7	244.5	244.1	238.8	211.1	204.8	203.4	200.0	198.9
32.5°	1152.4	753.1	262.5	227.5	228.9	204.4	195.7	197.1	195.9	192.3	190.7
35°	1165.4	693.2	242.7	212.1	207.9	184.6	186.6	189.2	188.8	183.8	182.2
37.5°	1188.8	636.5	229.7	199.2	181.5	174.7	177.9	181.9	180.9	177.5	176.3
40°	1213.3	583.1	219.0	189.2	165.8	168.0	170.8	173.0	173.9	174.9	174.1
42.5°	1237.2	527.4	206.0	178.9	159.3	161.7	162.9	165.1	170.4	174.1	173.9
45°	1251.4	475.0	192.5	164.3	154.2	155.6	154.8	159.1	165.6	171.8	172.0
47.5°	1267.2	434.3	181.9	150.8	149.2	150.2	147.9	152.2	158.1	165.6	166.4
50°	1286.4	410.0	173.4	140.1	142.5	142.5	141.9	145.9	154.2	162.9	164.5
52.5°	1308.1	405.2	166.2	132.4	135.8	135.6	136.2	142.1	151.2	159.7	161.1
55°	1334.6	418.1	158.5	126.7	129.3	130.1	132.0	138.8	146.5	156.2	156.7
57.5°	1365.5	444.2	152.4	122.2	123.3	125.9	129.1	135.2	143.5	154.2	154.8
58°	1370.6	449.7	151.4	121.8	122.2	125.1	128.7	134.6	142.9	154.6	155.2
60°	1370.8	468.1	149.2	120.0	117.6	122.6	126.5	132.4	141.9	156.0	157.3
62.5°	1322.2	467.9	147.7	117.4	112.9	119.0	123.5	130.5	140.9	159.3	162.1
65°	1164.2	425.2	140.1	113.5	109.1	115.8	121.0	129.1	143.7	173.9	175.7
67.5°	910.6	348.5	126.1	107.9	104.2	112.7	119.4	128.9	146.7	177.3	178.5
70°	602.1	260.7	110.7	101.6	99.0	108.9	120.2	135.6	143.3	170.2	167.0
72.5°	312.5	183.0	98.2	93.7	93.1	105.6	131.6	134.8	139.9	160.1	156.2
75°	164.1	127.1	87.4	85.0	86.0	104.8	155.4	131.2	135.6	153.2	160.7
77.5°	100.4	102.6	78.1	77.1	79.1	102.4	155.2	126.7	129.3	140.9	149.2
80°	67.2	83.2	71.0	71.2	72.5	93.7	139.4	119.6	121.6	133.2	141.7
82.5°	42.5	49.2	64.4	67.8	66.0	77.3	118.4	108.9	111.7	152.4	161.1
85°	21.5	30.8	55.9	65.2	59.5	54.2	96.1	95.5	96.9	109.9	114.8
87.5°	9.9	17.0	43.7	56.9	44.9	33.8	69.8	70.8	76.3	78.1	78.1
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)